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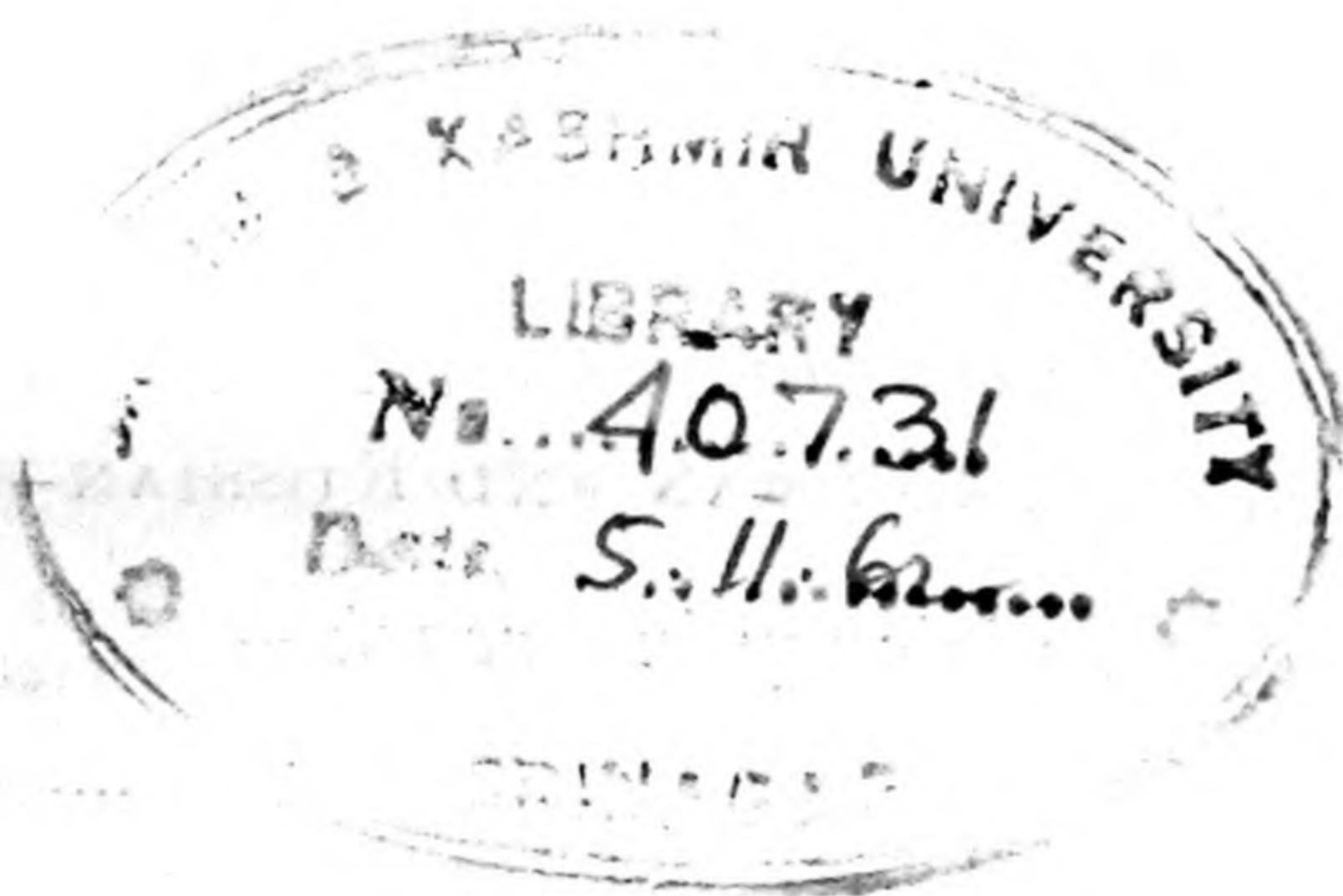


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# ALMANAC

Dates of the Convocation and meetings of the various University Bodies are provisional and liable to alteration).

**JULY, 1951.**

1	SUNDAY.	Supplementary Examinations for B.A. (Pass), B.Sc. (Pass) and B.Com. (Prev. and Final) begin. Supplementary First Professional Examination begins. Last date for receipt of applications for admission to the University, <b>Id-ul-Fitr.</b> Meeting of the Admission Committee.
2	Monday.	
3	Tuesday.	
4	Wednesday.	
5	Thursday.	Meeting of the Executive Council.
6	Friday.	
7	Saturday.	
8	SUNDAY.	
9	Monday.	First Term in the Faculties of Arts, Science, Law and Commerce begins. Last date for receipt of applications for admission to the Department of Oriental Studies in Sanskrit. Meeting of the Admission Sub-Committee for admission to the Department of Oriental Studies in Sanskrit. Meeting of the Admission Committee.
10	Tuesday.	
11	Wednesday.	
12	Thursday.	
13	Friday.	Meeting of the Board of Co-ordination.
14	Saturday.	
15	SUNDAY.	
16	Monday.	
17	Tuesday.	Meeting of the Executive Council. Last date for receipt of applications for admission to the Department of Oriental Studies in Arabic and Persian.
18	Wednesday.	
19	Thursday.	
20	Friday.	
21	Saturday.	Meeting of the Admission Sub-Committee for admission to the Department of Oriental Studies in Arabic and Persian. Last date for receipt of applications for Scholarships, Freeships, etc., in the Faculties of Arts, Science, Law and Commerce.
22	SUNDAY.	
23	Monday.	
24	Tuesday.	
25	Wednesday.	
26	Thursday.	
27	Friday.	
28	Saturday.	
29	SUNDAY.	
30	Monday.	
31	Tuesday.	



**AUGUST, 1951.**

1	Wednesday.	First Term in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern) begins.
2	Thursday.	
3	Friday.	
4	Saturday.	
5	SUNDAY.	Meeting of the Committees for the appointment of Examiners in the Faculties of Arts, Science, Medicine, Law and Commerce. Meeting of the Committees for the appointment of Examiners for the Diploma Examinations in Arabic, Persian and Sanskrit. Meeting of the Academic Council. Meeting of the Executive Council.
6	Monday.	
7	Tuesday.	
8	Wednesday.	
9	Thursday.	
10	Friday.	
11	Saturday	
12	SUNDAY.	Last date for receipt of applications for Scholarships, Freeships, etc., in the Faculty of Medicine. Last date for receipt of applications of private candidates for the B A., M.A. and M. Com. Examinations.  <b>Independence Day.</b>  <b>Raksha Bandhan.</b> Meetings of the Fellowships Committee, Scholarships and Women Scholarships Committees.
13	Monday.	
14	Tuesday.	
15	Wednesday.	
16	Thursday.	
17	Friday.	
18	Saturday.	
19	SUNDAY.	
20	Monday.	Meeting of the Freeships Committee.  <b>Krishna Janam Ashtami.</b>
21	Tuesday.	
22	Wednesday.	
23	Thursday.	
24	Friday.	
25	Saturday.	
26	SUNDAY.	Last date for receipt of applications for Diploma Examination in Russian.    Meeting of the Executive Council.
27	Monday.	
28	Tuesday.	
29	Wednesday.	
30	Thursday.	
31	Friday.	



**SEPTEMBER, 1951.**

1	Saturday.	Meeting of the Health, Residence and Discipline Board.
2	SUNDAY.	Diploma Examination in Russian.
3	Monday.	
4	Tuesday.	
5	Wednesday.	
6	Thursday.	
7	Friday.	
8	Saturday.	
9	SUNDAY.	Meeting of the Academic Council.  <b>Id-ul-Zuha.</b> Meeting of the Executive Council.
10	Monday.	
11	Tuesday.	
12	Wednesday.	
13	Thursday.	
14	Friday.	
15	Saturday.	
16	SUNDAY.	Last date for receipt of applications for Proficiency Examinations in French, German and Russian.
17	Monday.	
18	Tuesday.	
19	Wednesday.	
20	Thursday.	
21	Friday.	
22	Saturday.	
23	SUNDAY.	Proficiency Examinations in French, German and Russian.  Meeting of the Executive Council. Meeting of the Board of Co-ordination. Last date for receipt of Migration Certificates in the Faculties of Arts, Science, Law and Commerce.  First Term in the Faculties of Arts, Science, Law and Commerce ends.
24	Monday.	
25	Tuesday.	
26	Wednesday.	
27	Thursday.	
28	Friday.	
29	Saturday.	
30	SUNDAY.	



**OCTOBER, 1951.**

1	Monday.	Dasehra Recess begins. <b>Pitr Bisarjan Amawas.</b> <b>Birthday of Mahatma Gandhi.</b>
2	Tuesday.	Last date for receipt of applications for the October Examinations in Medicine.
3	Wednesday.	
4	Thursday.	
5	Friday.	
6	Saturday.	
7	SUNDAY.	} <b>Dasehra.</b>
8	Monday.	
9	Tuesday.	
10	Wednesday.	
11	Thursday.	} <b>Moharram.</b> Dasehra Recess ends.
12	Friday.	
13	Saturday.	
14	SUNDAY.	Second Term in the Faculties of Arts, Science, Law and Commerce begins. October Examinations in Medicine begin.
15	Monday.	
16	Tuesday.	
17	Wednesday.	
18	Thursday.	
19	Friday.	
20	Saturday.	
21	SUNDAY.	Meeting of the Executive Council.
22	Monday.	
23	Tuesday.	
24	Wednesday.	
25	Thursday.	
26	Friday.	
27	Saturday.	
28	SUNDAY.	Last date for receipt of Migration Certificates in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern). First Term in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern) ends.
29	Monday.	
30	Tuesday.	} <b>Dewali.</b>
31	Wednesday.	



# NOVEMBER, 1951.

1	Thursday.	<b>Dewali.</b> Second Term in the Faculty of Medicine and the Faculty of Medicine (Ancient and Modern) begins.
2	Friday.	
3	Saturday.	
4	SUNDAY.	Meeting of the Executive Council.
5	Monday.	
6	Tuesday.	
7	Wednesday.	
8	Thursday.	
9	Friday.	
10	Saturday.	
11	SUNDAY.	Meeting of the Faculty of Arts. Meeting of the Faculty of Science. Meeting of the Faculty of Medicine. Meeting of the Faculty of Law. Meeting of the Faculty of Commerce. Lucknow University Act received assent of H. E. The Governor-General, 1920.
12	Monday.	
13	Tuesday.	
14	Wednesday.	
15	Thursday.	
16	Friday.	
17	Saturday.	
18	SUNDAY.	<b>Chehlum.</b>  Meeting of the Executive Council.
19	Monday.	
20	Tuesday.	
21	Wednesday.	
22	Thursday.	
23	Friday.	
24	Saturday.	
25	SUNDAY.	
26	Monday.	
27	Tuesday.	
28	Wednesday.	
29	Thursday.	
30	Friday.	



**DECEMBER, 1951**

1	Saturday.	
2	SUNDAY.	
3	Monday.	
4	Tuesday.	
5	Wednesday.	
6	Thursday.	
7	Friday.	Meeting of the Executive Council.
8	Saturday.	
9	SUNDAY.	
10	Monday.	Meeting of the Academic Council. Last date for receipt of applications for Proficiency Examinations in French, German and Russian.
11	Tuesday.	Lucknow University Act came into Force, 1920
12	Wednesday.	<b>Bara Wafat.</b>
13	Thursday.	
14	Friday.	
15	Saturday.	
16	SUNDAY.	
17	Monday.	Proficiency Examinations in French, German and Russian.
18	Tuesday.	Last date for receipt of applications for Examinations in the Faculties of Arts, Science, Medicine and Commerce.
19	Wednesday.	
20	Thursday.	
21	Friday.	Meeting of the Executive Council.
22	Saturday.	<b>Convocation.</b>
23	SUNDAY.	
24	Monday.	Meeting of the Board of Co-ordination. Second Term in all the Faculties ends.
25	Tuesday.	<b>Christmas.</b> Christmas Recess begins.
26	Wednesday.	
27	Thursday.	
28	Friday.	
29	Saturday.	
30	SUNDAY.	
31	Monday.	Christmas Recess for the Faculty of Medicine and the Faculty of Medicine (Ancient and Modern) ends.



**JANUARY, 1952.**

1	Tuesday.	<b>New Year's Day.</b> Third Term in the Faculty of Medicine and the Faculty of Medicine (Ancient and Modern) begins.
2	Wednesday.	
3	Thursday.	
4	Friday.	
5	Saturday.	
6	SUNDAY.	Christmas Recess for the Faculties of Arts, Science, Law and Commerce ends. Third Term in the Faculties of Arts, Science, Law and Commerce begins. Meeting of the Committee of Reference. Meeting of the Executive Council.
7	Monday.	
8	Tuesday.	
9	Wednesday.	
10	Thursday.	
11	Friday.	
12	Saturday.	
13	SUNDAY.	Last date for receipt of applications for Diploma Examinations in Arabic, Persian and Sanskrit. Last date for receipt of applications for the Examinations in Law.
14	Monday.	
15	Tuesday.	
16	Wednesday.	
17	Thursday.	
18	Friday.	
19	Saturday.	
20	SUNDAY.	Meeting of the Executive Council.
21	Monday.	
22	Tuesday.	
23	Wednesday.	
24	Thursday.	
25	Friday.	
26	Saturday.	
27	SUNDAY.	
28	Monday.	
29	Tuesday.	
30	Wednesday.	
31	Thursday.	



**FEBRUARY, 1952.**

1	Friday.	
2	Saturday.	
3	SUNDAY.	
4	Monday.	Meeting of the Faculty of Arts.
5	Tuesday.	Meeting of the Faculty of Science.
6	Wednesday.	Meeting of the Faculty of Medicine.
7	Thursday.	
8	Friday.	Meeting of the Executive Council.
9	Saturday.	
10	SUNDAY.	
11	Monday.	Meeting of the Faculty of Law.
12	Tuesday.	Meeting of the Faculty of Commerce.
13	Wednesday.	
14	Thursday.	
15	Friday.	
16	Saturday.	
17	SUNDAY.	
18	Monday.	Last date for receipt of applications for the Proficiency Examinations in French, German and Russian.
19	Tuesday.	
20	Wednesday.	Last date for receipt of applications for Diploma Examinations in French, German and Russian.
21	Thursday.	
22	Friday.	Meeting of the Executive Council.
23	Saturday.	
24	SUNDAY.	
25	Monday.	} Proficiency Examinations in French, German and Russian.
26	Tuesday.	
27	Wednesday.	} Diploma Examinations in French, German and Russian. (27, 28 & 29)
28	Thursday.	
29	Friday.	



**MARCH, 1952.**

1	Saturday.	
2	SUNDAY.	
3	Monday.	
4	Tuesday.	
5	Wednesday.	
6	Thursday.	
7	Friday.	Meeting of the Executive Council.
8	Saturday.	
9	SUNDAY.	
10	Monday.	
11	Tuesday.	
12	Wednesday.	
13	Thursday.	Meeting of the Academic Council.
14	Friday.	
15	Saturday.	
16	SUNDAY.	
17	Monday.	B.A. (Hons.), M.A. and M.A. Parts I and II, B.Sc. (Hons.), M.Sc. and M.Sc. Parts I and II (Maths.), and M.Com. Parts I and II Examinations begin.
18	Tuesday.	
19	Wednesday.	
20	Thursday.	
21	Friday.	Meeting of the Executive Council.
22	Saturday.	
23	SUNDAY.	
24	Monday.	B.Sc. (Hons.), M.Sc. and M.Sc. Parts I and II (except Maths.) Examinations begin. B.Com. (Previous and Final) Examinations begin. B.A. Preliminary & Pass and B.Sc. Preliminary & Pass Examinations begin.
25	Tuesday.	
26	Wednesday.	
27	Thursday.	
28	Friday.	
29	Saturday.	Meeting of the Court.
30	SUNDAY.	
31	Monday.	



**APRIL, 1952.**

1	Tuesday.	
2	Wednesday.	
3	Thursday.	
4	Friday.	
5	Saturday.	
6	SUNDAY.	
7	Monday.	M.B.B.S., D.M.R.E. Part I, D.L.O. Part I, D.T.D. Part I, B.D.S., B.M.B.S., M.S. and M.D. Examinations begin.
8	Tuesday.	D.S.S., D.P.A. and D.F.A. Examinations begin.
9	Wednesday.	
10	Thursday.	
11	Friday.	Meeting of the Executive Council.
12	Saturday.	
13	SUNDAY.	
14	Monday.	Diploma Examinations in Arabic, Persian and Sanskrit begin.
15	Tuesday.	
16	Wednesday.	L.T. and M Ed. Examinations begin.
17	Thursday.	LL.M. Parts I and II and LL.B. (Previous and Final) Examinations begin.
18	Friday.	
19	Saturday.	
20	SUNDAY.	
21	Monday.	
22	Tuesday.	
23	Wednesday.	
24	Thursday.	
25	Friday.	Meeting of the Executive Council.
26	Saturday.	
27	SUNDAY.	
28	Monday.	
29	Tuesday.	
30	Wednesday.	Meeting of the Board of Co-ordination, Third Term in all the Faculties ends.



**MAY, 1952.**

1	Thursday.	
2	Friday.	
3	Saturday.	
4	SUNDAY.	
5	Monday.	
6	Tuesday.	
7	Wednesday.	
8	Thursday.	
9	Friday.	
10	Saturday.	
11	SUNDAY.	
12	Monday.	
13	Tuesday.	
14	Wednesday.	
15	Thursday.	
16	Friday.	
17	Saturday.	
18	SUNDAY.	
19	Monday.	
20	Tuesday.	
21	Wednesday.	
22	Thursday.	
23	Friday.	
24	Saturday.	
25	SUNDAY.	
26	Monday.	
27	Tuesday.	
28	Wednesday.	
29	Thursday.	
30	Friday.	
31	Saturday.	

**JUNE, 1952.**

1	<b>SUNDAY.</b>	
2	<b>Monday.</b>	
3	<b>Tuesday.</b>	
4	<b>Wednesday.</b>	
5	<b>Thursday.</b>	
6	<b>Friday.</b>	
7	<b>Saturday.</b>	
8	<b>SUNDAY.</b>	
9	<b>Monday.</b>	
10	<b>Tuesday.</b>	
11	<b>Wednesday.</b>	
12	<b>Thursday.</b>	
13	<b>Friday.</b>	
14	<b>Saturday.</b>	
15	<b>SUNDAY.</b>	
16	<b>Monday.</b>	
17	<b>Tuesday.</b>	
18	<b>Wednesday.</b>	
19	<b>Thursday.</b>	
20	<b>Friday.</b>	
21	<b>Saturday.</b>	
22	<b>SUNDAY.</b>	
23	<b>Monday.</b>	
24	<b>Tuesday.</b>	
25	<b>Wednesday.</b>	
26	<b>Thursday.</b>	<b>Pre-Medical Test.</b>
27	<b>Friday.</b>	
28	<b>Saturday.</b>	
29	<b>SUNDAY.</b>	
30	<b>Monday.</b>	



## IMPORTANT DATES.

### Terms.

July 16, 1951	.... First Term in the Faculties of Arts, Science, Commerce and Law begins.
August 1, 1951	.... First Term in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern) begins.
September 29, 1951	.... First Term in the Faculties of Arts, Science, Law and Commerce ends.
October 15, 1951	.... Second Term in the Faculties of Arts, Science, Law and Commerce begins.
October 29, 1951	.... First Term in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern), ends.
November 2, 1951	.... Second Term in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern) begins.
December 24, 1951	.... Second Term in all the Faculties ends.
January 2, 1952	.... Third Term in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern) begins.
January 9, 1952	.... Third Term in the Faculties of Arts, Science, Law and Commerce begins.
April 30, 1952	.... Third Term in all the Faculties end.

### Last dates for receipt of Applications.

June 15, 1951	.... Last date for receipt of applications for the Supplementary Examinations for B. A. (Pass), B. Sc. (Pass), and B. Com. (Previous and Final).
June 15, 1951	.... Last date for receipt of applications for the Supplemetary First Professional Examinations.
July 5, 1951	.... Last date for receipt of applications for admission to the University.
July 16, 1951	.... Last date for receipt of applications for admission to the Department of Oriental Studies in Sanskrit.



July 27, 1951	....	Last date for receipt of applications for admission to the Department of Oriental Studies in Arabic and Persian.
July 30, 1951	...	Last date for receipt of applications for Scholarships, Freeships, etc., in the Faculties of Arts, Science, Law and Commerce.
August 13, 1951	....	Last date for receipt of applications for Scholarships, Freeships, etc., in the Faculty of Medicine.
August 13, 1951	....	Last date for receipt of applications of private candidates for B.A., M.A. and M.Com. Examination.
August 27, 1951	....	Last date for receipt of applications for Diploma Examination in Russian.
September 18, 1951	....	Last date for receipt of applications for Proficiency Examinations in French, German and Russian.
September 29, 1951	....	Last date for receipt of Migration Certificate in the Faculties of Arts, Science, Law and Commerce.
October 4, 1951	....	Last date for receipt of applications for the October Examinations in Medicine.
October 29, 1951	....	Last date for receipt of Migration Certificates in the Faculty of Medicine and Faculty of Medicine (Ancient and Modern).
December 10, 1951	....	Last date for receipt of applications for Proficiency Examinations in French, German and Russian.
December 18, 1951	....	Last date for receipt of applications for Examinations in the Faculties of Arts, Science, Medicine and Commerce.
January 16, 1952	....	Last date for receipt of applications for Examinations in Law. Last date for receipt of applications for Diploma Examinations in Arabic, Persian and Sanskrit.
February 18, 1952	....	Last date for receipt of applications for Proficiency Examinations in French, German and Russian.
February 20, 1952	....	Last date for receipt of applications for Diploma Examination in French, German and Russian.



## Date of Commencement of Examinations.

June 27, 1951	....	Pre-Medical Test.
July 4, 1951	....	Supplementary Examinations for B.A. (Pass), B.Sc. (Pass) and B.Com. (Previous and Final).
July 4, 1951	....	Supplementary First Professional Examination.
September 3, 1951	....	Diploma Examination in Russian.
September 25, 1951	....	} Proficiency Examinations in French, German and Russian.
December 17, 1951	....	
February 25, 26 & 27, 1952	....	
October 15, 1951	....	October Examinations in Medicine.
February 27, 1952	}	Diploma Examinations in French, German and Russian.
February 28, 1952		
February 29, 1952		
March 17, 1952	....	B.A. (Hons.), M.A. and M.A. Parts I and II, B.Sc. (Hons.), M.Sc. and M.Sc. Parts I & II (Maths.), and M.Com. Parts I & II Examinations.
March 24, 1952	....	B.Sc. (Hons.), M.Sc. and M.Sc. Part I and II (except Maths.) Examinations. B.Com. Previous and Final Examinations. B.A. Preliminary & Pass and B.Sc. Preliminary & Pass Examinations.
April 7, 1952	....	D.S.S., D. P. A. and D. F. A.E examinations. M.B.B.S., D.M.R.E. Part I, D.L.O. Part I, D.T.D. Part I, B.D.S., B.M.B. S., M.S. and M.D. Examinations.
April 14, 1952	....	Diploma Examinations in Arabic, Persian and Sanskrit.
April 16, 1952	....	L. T. and M.Ed. Examinations. LL.M. Parts I and II and LL.B. Previous and Final Examinations.
June 26, 1952	....	Pre-Medical Test.
July 3, 1952	....	Supplementary Examinations.



# LIST OF HOLIDAYS FOR 1951.

Serial No.	Description of holidays.	Date.	Days of week.	No. of days.	Remarks.
1	New Year's Day	January 1	Monday	1	
2	Republic Day	January 26	Friday	1	
3	Basant Panchmi	February 10	Saturday	1	
4	Sheoratri	March 6	Tuesday	1	
5	Holi or Doljatra	March 23 &	Friday &	2	
6	Good Friday	March 23	Saturday Friday	1	
7	Ram Naumi	April 15	Friday	1	
8	Mahabir-ji-ka-Mela	May 15	Sunday	1	
9	Alvida	June 29	Tuesday	1	
10	Id-ul-Fitr	July 6	Friday	1	(M)
11	Independence Day	August 15	Friday	1	(M)
12	Raksha Bandhan	August 17	Wednesday	1	
13	Krishna Janma Ashtmi	August 24	Friday	1	
14	Id-ul-Zuha	September 13	Friday	1	
15	Pitra Bisarjan Amawas	October 1	Thursday	1	(M)
16	Birthday of Mahatma Gandhi.	October 2	Monday	1	
17	Dasehra*	October 8 to 11.	Tuesday	1	
18	Moharram	October 12 & 13.	Monday to Thursday	4	
19	Dewali	October 20 to November 1	Friday and Saturday	2	(M)
20	Chehlum	November 21	Tuesday to Thursday.	3	
21	Bara Wafat	December 12	Wednesday	1	(M)
22	Christmas**	December 25	Wednesday	1	(M)
			Tuesday	1	

\*The Dasehra Recess will be from Monday, October 1 to Saturday October 13, 1951.

\*\*The Christmas Recess will be from Tuesday, December 25, 1951 to January 8 1952, for all Faculties except in the Faculty of Medicine, where it will be from December 25, 1951 to January 1, 1952.

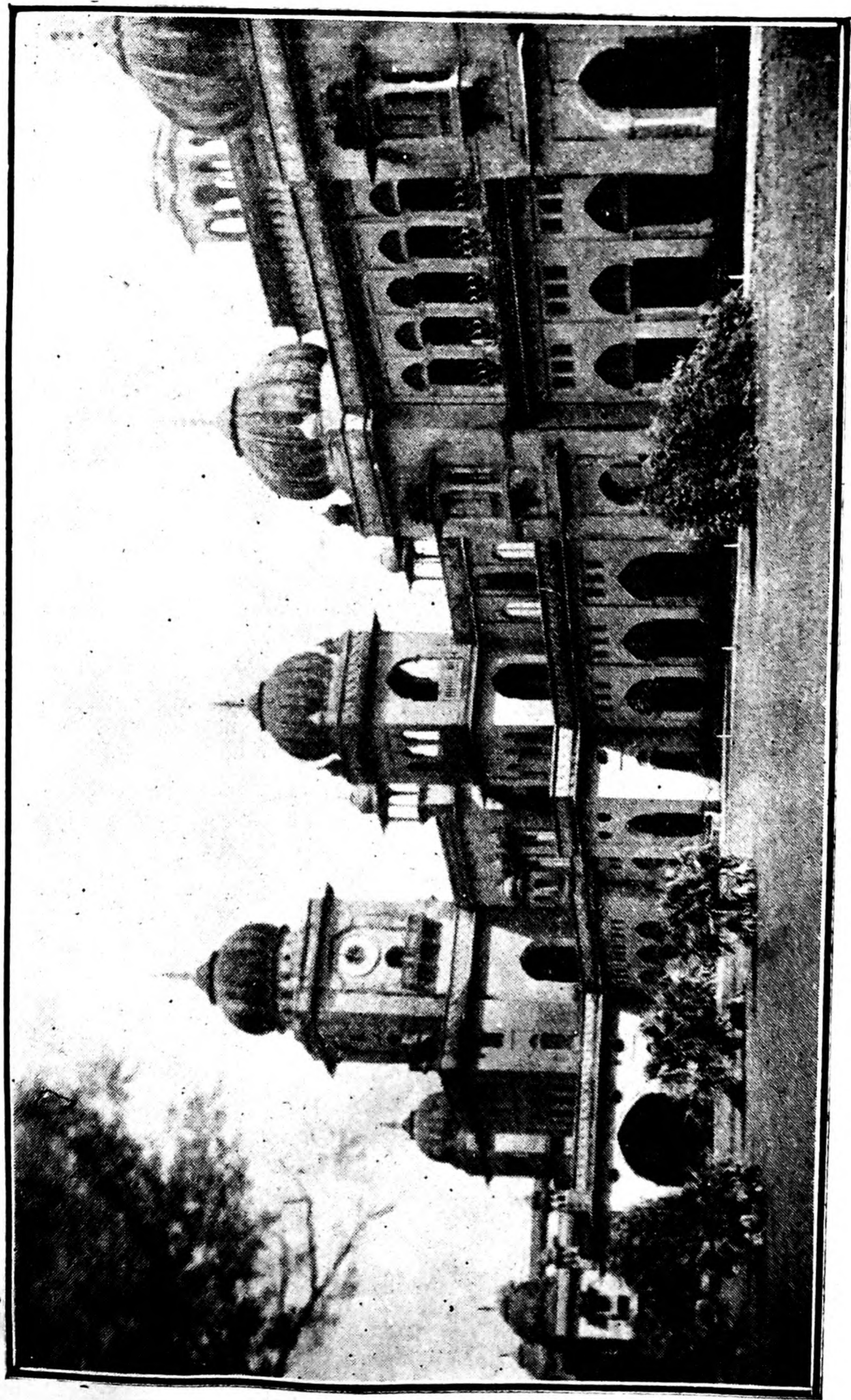
N. B.—The Executive Council further decided that 3 days additional holidays be added to the Dasehra holidays and four days to the Christmas holidays for the Administrative, Ministerial and Inferior Staff.

(M) Depends on appearance of Moon.









CANNING COLLEGE, LUCKNOW UNIVERSITY.



## SHORT HISTORY OF THE LUCKNOW UNIVERSITY.

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The idea of starting a University at Lucknow was first mooted by the Hon'ble Raja Sir Mohammad Ali Mohammad Khan, Khan Bahadur, K.C.I.E. of Mahmudabad, who contributed an article to the columns of "*The Pioneer*" urging the foundation of a University at Lucknow. A little later His Honour Sir Harcourt Butler, K.C.S.I., K.C.I.E., was appointed Lieutenant-Governor of the United Provinces, and his well-known interest in all matters under his jurisdiction, specially in matters educational, gave fresh life and vigour to the proposal. The first step to bring the University into being was taken when a General Committee of educationalists, and persons interested in University Education, appointed for the purpose, met in Conference at Government House, Lucknow, on the 10th November, 1919. At this meeting His Honour, who was in the Chair, outlined the proposed scheme for the University. A discussion followed, and it was resolved that Lucknow University should be a Unitary, Teaching and Residential University of the kind recommended by the Calcutta University Commission, 1919, and should consist of the Faculties of Arts, including Oriental Studies, Science, Medicine, Law, etc. A number of other resolutions were also passed and six sub-committees were formed, five of them to consider questions connected with the University and one to consider the arrangements for providing Intermediate Education. These sub-committees met during the months of November and December, 1919, and January, 1920; and the reports of their meetings were laid before a second Conference of the General Committee at Lucknow on 26th January, 1920, their proceedings were considered and discussed, and the reports of five of the sub-committees were,



subject to certain amendments, confirmed. The question of incorporation of the Medical College in the University, however, was for the time being left open for expression of opinion. At the close of the Conference donations of one lakh each from the Rajas of Mahmudabad and Jehan-girabad were announced.

The resolutions of the first Conference together with the recommendations of the sub-committees as confirmed at the second Conference were laid before a meeting of the Allahabad University on the 12th March, 1920, and it was decided to appoint a sub-committee to consider them and report to the Senate. The report of the sub-committee was considered at an Extraordinary Meeting of the Senate on the 7th August, 1920, at which the Chancellor presided, and the scheme was generally approved. In the meantime the difficulty of incorporating the Medical College in the University had been removed. During the month of April, 1920, Mr C. F. dela Fosse, the then Director of Public Instruction, United Provinces, drew up a Draft Bill for the establishment of the Lucknow University which was introduced in the Legislative Council on the 12th August, 1920. It was then referred to a Select Committee which suggested a number of amendments, the most important being the liberalising of the constitution of the various University bodies and the inclusion of a Faculty of Commerce. This Bill, in an amended form, was passed by the Council on 8th October, 1920. The Lucknow University Act, No. V of 1920, received the assent of His Honour the Lieutenant-Governor on 1st November and of the Governor-General on 25th November, 1920.

The Court of the University was constituted in March, 1921, and the first meeting of the Court was held on the 21st March, 1921, at which His Excellency the



Chancellor presided. The other University authorities such as the Executive Council, the Academic Council, and Faculties came into existence in August and September, 1921. Other Committees and Boards, both statutory and otherwise, were constituted in course of time.

On the 17th July, 1921, the University undertook teaching, both formal and informal. Teaching in the Faculties of Arts, Science, Commerce and Law is being done in the Canning College and teaching in the Faculty of Medicine in the King George's Medical College and Hospital. The Canning College was handed over to the University on the 1st July, 1922, although previous to this date the buildings, equipment, staff, etc., belonging to the Canning College had been ungrudgingly placed at the disposal of the University for the purposes of teaching and residence. The King George's Medical College and the King George's Hospital were transferred by the Government to the University on the 1st March, 1921.

The following three Colleges provided the nucleus for the establishment of the University:—

- (1) The King George's Medical College.
- (2) The Canning College.
- (3) The Isabella Thoburn College.

This was a rich inheritance for the new-born University in 1920, both materially and intellectually, and it brought with it also the richest of all heritages "a fine tradition of some fifty-five years in the case of the Canning College and some nine years in the case of the King George's Medical College." To this the generous 'Taluq-



dars of Oudh added an endowment of nearly 30 lakhs. The support from Sir Harcourt Butler's Government was strong and hearty. Since then the Government of the United Provinces have annually contributed a substantial share towards the maintenance of the University. Within a comparatively short period of twenty-nine years the University of Lucknow has built new hostels and laboratories, equipped the old ones more completely, acquired new land, built more residential bungalows, and appointed a very distinguished staff to supplement the staff originally taken over from the Canning College and the Medical College.

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## ADMINISTRATIVE STAFF

*Vice-Chancellor.*

Acharya Narendra Deva, M.A., LL.B.

*Honorary Treasurer*

The Hon'ble Shri C. B. Gupta, M.A., LL.B., M.L.A.

## DEANS OF FACULTIES.

*Arts.*

Prof. N. K. Sidhanta (*on leave*)

..... (*Acting*)

*Science.*

\* Dr. A. C. Chatterji, D.Sc., DR. ING.

*Medicine.*

Dr. Sankata Narain Mathur, M.S., F.R.C.S.

*Medicine (Ancient and Modern)*

Dr A. N. Singh, D.Sc. (*Officer-in-Charge*)

*Law.*

Dr. R. U. Singh, M.A., LL.B., S.J.D., M.P.

*Commerce.*

Prof. B. N. Das Gupta, B.A., A.S.A.A., F.C.A.

*Registrar.*

Shri K. D. Tewari, M.A., LL.B.

*Assistant Registrar.*

Rai Sahib Sheo Shankar.

*Assistant Registrar (Accounts)*

Shri P. K. P. Pillai, B.A., LL.B.

*Assistant Registrar (Attached to Vice-Chancellor)*

Shri P. C. Mital, M.A.

*Honorary Proctor.*

Dr. Rama Dhar Misra, M.A., PH.D., M.L.A.

\* From September 12, 1951.



*\*Additional Proctors.*

1. Dr. A. V. Rao, M.A., PH.D., Bar-at-Law.      }
2. Capt. A. L. Loomba, M.A.                        } Faculty of Arts.
3. Dr. S. K. Pande D.Sc.—Faculty of Science.
4. Dr. Dharam Narayan, M.B.B.S., M.S.—Faculty of Medicine.
5. Shri B. N. Sharma, B.A., LL.M.—Faculty of Law.
6. Dr. K. C. Sarkar, M.A., PH.D.—Faculty of Commerce.
7. Dr. (Kumari) M. Wallace, M.A., PH.D.—for Women Students.

*Honorary Librarian.*

†Prof. K. A. S. Iyer, M.A.

*Senior-most N. C. C. Officer.*

Capt. A. L. Loomba, M.A.

*Superintendent, Gandhi Memorial and Associated Hospitals.*

.....  
*Assistant Superintendent, Gandhi Memorial and Associated Hospitals*  
 .....

**CANNING COLLEGE.**

*‡ Wardens.*

*Appointed from May 1, 1949.*

Prof. Kali Prasad, M.A., LL.B.—(Butler Hostel).

Dr. A. C. Chatterji, D.Sc., DR. ING.—(Subhas Hostel).

Dr. K. N. Bahl, D.PHIL., D.Sc., F.R.A.S.B., F.N.I.—(Tilak Hostel).

Dr. A. N. Singh, D.Sc.—(Mahmudabad Hostel).

Dr. G. S. Sharma, M.A., LL.M., J.S.D.—(Habibullah Hostel).

\* Appointed upto July 15, 1951.

† Appointed from July 16, 1951.

‡ Appointed for a period of three years, except Dr. K. N. Bahl.



Dr. Baljit Singh. M.A., LL.B., PH.D., D.LITT.—(Ismail Building and V.C's. Lodge Hostels).

Prof. B. N. Das Gupta, B.A., A.S.A.A., F.C.A.—(New Hostel).

\*Dr. (Kumari) Bina Roy, M.A., PH.D. (Kailash Hostel.)

*\*\*Assistant Wardens.*

*Appointed from May 1, 1949.*

Dr. G. S. Varma, M.SC., PH.D.—(Butler Hostel).

Dr. Om Prasad Gupta, PH.D., F.S.S.—(Subhas Hostel).

Shri S. C. Varma, M.SC.—Tilak Hostel).

Dr. K. C. Sarkar, M.A., PH.D.—(Mahmudabad Hostel).

Dr. P. D. Gupta, M.SC., PH.D.—(Habibullah Hostel).

Dr. Ram Rakshpal, M.SC., PH.D.—(Ismail Building Hostel)

Shri Ramesh Mohan, M.A.—(New Hostel).

\*Kumari S. Johnson, M.A.—(Kailsh Hostel).

*Medical Officer.*

Dr. B. N. Mehrotra, M.B.B.S.

*Resident Medical Officer.*

Dr. S. B. Singh, L.M.P., L.P.H.

*†Superintendent of Gardens and Grounds.*

The Head of the Department of Botany and Geology.

KING GEORGE'S MEDICAL COLLEGE

*Principal.*

Dr. Sankata Narian Mathur, M.S., F.R.C.S.

---

\*Appointed upto May 15, 1952.

\*\* Appointed for a period of three years.

† Appointed for one year from March 28, 1951.

*\*Wardens.**Appointed from May 2, 1949*

Dr. V. S. Mangalik, M.D., D.C.P.—(Chakravarti Hostel).

Dr. M. L. Gujral, M.B.B.S., M.R.C.P.—(Gokaran Nath Misra Hostel).

Dr. S. N. Mathur, M.S., F.R.C.S.—(Vijaya Lakshmi Hostel).

*\*Assistant Wardens.**Appointed upto May 1, 1952.*

Dr. K. B. Kunwar, M.D.—(Chakravarti Hostel).

Dr. K. P. Bhargava, M.D.—(Gokaran Nath Misra Hostel).

**ISABELLA THOBURN COLLEGE.***Principal.*

**Kumari Ava Hunt, M.A., (Chicago).**

*Vice-Principal.*

**Kumari Florence Salzer, M.A.**

*Chief Warden.*

**Kumari M. K. Landrum, M.A.**

*Medical Officer.*

**Dr. (Kumari) A. Hodge, M.A., CH.B. (Edin).**

---

*\*Appointed for a period of three years, except Dr. S. N. Mathur.*



MAHILA VIDYALAYA COLLEGE

*Principal.*

Kumari K. Sabarwal, M.A.

*Warden.*

Kumari M. Bose, M.A.

*Medical Officer.*

Dr. (Shrimati) R. Chawla, L.S.M.F.

LUCKNOW CHRISTIAN COLLEGE

*Principal.*

Dr. C. M. Thacore, M.A., T.DIP., PH.D.

*Vice-Principal.*

Shri N. K. Mundle, M.Sc., F.P.S.

*Wardens.*

Shri K. Appasamy, M.A., B.D.—(C. L. Bare Hostel).

Shri E. H. Chowfin, M.Sc., L.T.—(O. C. Hostel).

*Medical Officer*

..... (Vacant)

\*KANYAKUBJA COLLEGE

*Principal.*

Shri Madan Gopal Misra, M.Sc.

*Vice-Principal.*

Shri N. C. Chatterji, M.A.

\*Recognition granted upto the end of the Session 1953-54.



*Warden.*

Shri Karuna Shanker Misra, M.A.

*Medical Officer.*

..... (Vacant)

\*KARAMAT HUSAIN MUSLIM GIRLS' COLLEGE.

*Principal*

Kumari Roshan Jahan Begam, M.A.

*Warden.*

..... (Vacant)

*Medical Officer.*

Dr. Tara Chand, M.B.B.S.

\*SHIA COLLEGE.

*Principal*

Shri Ibn-e-Hasan Rizvi, M.A.

*Vice-Principal.*

..... (Vacant)

*Warden.*

Shri Naqi Hasan Alley, M.A., LL.B., A.T.C.

*Medical Officer.*

..... (Vacant)

\*Recognition granted upto the end of the Session 1951-52.



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WORKS DEPARTMENT

*Superintendent of Works, Canning College and General Divisions.*

\*Dr. A. N. Singh, D.Sc.

*Suprintendent of Works, K. G. Medical College Division.*

.....  
*University Civil Engineer.*

.....(Vacant)

*University Electrical Engineer.*

Shri S. C. Chakravarti, B.E.E., A.M.I.E. (Ind.), Chartered Electrical Engineer.



## TEACHING STAFF. FACULTY OF ARTS.

### English.—

1. Shri N. K. Sidhanta, M.A. (Cal.), M.A. (Cantab.), Professor  
(on leave).
2. Shri R. R. Sreshta, M.A., LL.B. (Cantab.), Reader (Offg.  
Professor).
3. Dr. A. Vittal Rao, M.A. (Madras), PH.D. (Lond.), Bar-at-Law,  
Reader.
4. Kumari M. A. Dimmitt, B.A. (De Pauw), M.A. (Wellesley),  
Reader (I. T. C.)
5. Shri A. T. Bhattacharya, M.A. (Luck.), Lecturer (Offg. Reader).  
.....Temp. Lecturer.
6. Shri Dayamoy Mitra, M.A. (Luck.), M.A. (Cal.), Lecturer.
7. Shri R. S. Rastogi, M.A. (Luck.), Lecturer.
8. Shri S. K. Narain, M.A. (Luck.), Lecturer.
9. Shri Ramesh Mohan, M.A. (Luck.), Lecturer.
10. Shri Naresh Chandra, M.A., Lecturer.
11. Shri G. P. Johri, M.A. (Luck.), B.LITT. (Oxon.), Lecturer.
12. Shri Saryu Prasad Misra, M.A. (Luck.), Lecturer.
13. Dr. Shri Murari Sinha, M.A., PH.D. (Luck.), Lecturer.
14. Kh. Jamiluddin, M.A. (Luck.), Lecturer.
15. Dr. Mohammad Ahsan Farooqi, M.A., PH.D., Lecturer.
16. Dr. P. K. Saksena, M.A., PH.D., Lecturer.
17. ....Lecturer.
18. Shrimati W. F. Ward, M.A., Teacher (I. T. C.)
19. Kumari Mohini Advani, M.A., Teacher (I. T. C.)
20. Kumari Deoki Devi Pandey, M.A., LL.B., Teacher (M. V. C.)
21. Kumari Manorama Vyas, M.A., Teacher (M. V. C.)
22. Kumari S. Dube, M.A., D.T., Teacher (M. V. C.)
23. Dr. C. M. Thacore, M.A., T. DIP., PH.D., Teacher (L. C. C.)
24. Shri K. Appasamy, M.A., B.D., Teacher (L.C. C.)
25. Shri N. C. Chatterji, M.A., Teacher (K. K. C.)
26. Kumari Wasimun Nisa Afridi, M. A., Teacher (K. H. C.)



*Philosophy.*—

1. Shri Kali Parsad, M.A., LL.B. (Alld.), Professor.
2. Dr. Raghuvansh Bahadur Mathur, B.A. (Hons.) (Lond.), PH.D. (Lond.), D.P.A. (Lond.), CERT. ED. (Cantab.), Reader.
3. Dr. Raj Narain, M.A., LL.B. (Luck.), PH.D. (Columbia), Reader
4. Dr. (Shrimati) Surama Dasgupta, M.A., PH.D. (Cal.), PH.D. (Cantab.), Reader.
5. Dr. (Kumari) Bina Roy, M.A., PH.D., Reader (I. T. C.)
6. Kumari K. Sabarwal, M.A., Reader (M. V. C.)
7. Dr. Hari Shanker Asthana, M.A., PH.D. (Luck.), Lecturer.
8. Shri Saligram Chaturvedi, M.A., DIP. ED., M.ED., Lecturer (*on leave*).
- .....Temp. Lecturer.
9. Shri R. M. Loomba, M.A., LL.B., Lecturer.
10. Dr. (Kumari) V. Paranjoti, M.A., L.T., PH.D., Lecturer.
11. Shri Lakshmi Kant, M.A., B.SC., B.ED.SC., Lecturer.
12. Shri S. N. Jha, B.SC., M.A., L.T., Lecture
13. Shri R. P. Singh, M.A., B.T., B.ED.SC., Lecturer.
14. Dr. Nand Kishore 'Devaraja,' M.A., D.PHIL., Lecturer.
15. Shri Sri Chandra, M.A., Lecturer.
16. Shri M. S. Mangalik, M.A., L.T., DIP. ED., Lecturer.
17. ....Lecturer.
18. Kumari L. V. Williams, M.A. (Ohio), Teacher (I. T. C.)
19. Kumari M. Shukla, M.A., D.T., Teacher (I. T. C.)
20. Kumari D. M. Bearden, M.A., Teacher (I. T.C.)
21. Kumari E. H. Sluyter, M.A., Teacher (I. T.C.)
22. Kumari E. Shipstone, B.A., D.T. (Luck.), M.A. (Scarill College, U. S. A.), Teacher (I. T. C.)
24. Kumari Priti Kanji Lal, M.A., B.T., Teacher (M. V. C.)
25. Shrimati Indra Bhasin, M.A., Teacher (K. H. C.)



*\*History.—*

Dr. Radha Kumud Mookerji, M.A., PH.D. (Cal.), F. R. A. S. B., Vidyavaibhava Sir Sayaji Rao Gaekwad Prizeman, Itihasa-Siromani (Baroda), Premchand Roychand Scholar, Emeritus Professor.

1. Dr. K. R. Qanungo, M.A., PH.D., Professor.
- ✓ 2. Dr. S. N. Das Gupta, M.A. (Lond.), F.R.H.S. (Lond.), D.LITT. (Luck.), Reader.
3. Shri C. D. Chatterji, M.A. (Cal.), Reader.
4. Dr. N. L. Chatterji, M.A. (Alld.), PH.D., D.LITT. (Luck.), Reader.
5. Kumari S. E. Johnson, M.A. (Columbia), Reader (I. T. C.)
6. Shri Girja Shanker Misra; M.A., Lecturer.
7. Dr. Ram Kumar Dikshit, PH.D., Lecturer.
8. Shri R. N. Nagar, M.A. (Luck.), Lecturer.
9. Shri Baij Nath Puri, M.A. (Luck.), Lecturer.
10. Shri Krishna Chandra Srivastava, M.A., Lecturer.
11. Shri Vishambhar Nath, M.A., Lecturer.
12. ....Lecturer
13. Kumari Indira Dass, M.A. (Luck.), Teacher (I. T. C.)
14. Kumari Brij Saigal, M.A., Teacher (I.T.C.).
15. Shrimati Rameshwari Devi Srivastava, M.A., B.SC. ED., Teacher (M. V. C.)
16. Shrimati C. Sinha, M. A., Teacher (M. V. C.)
17. ....Teacher (K. H. C.)

*Political Science.—*

1. ....Professor.
  2. Dr. B. M. Sharma, M.A., B.SC. (Alld.), LL.B., PH.D., D.LIT. (Luck.), Reader
  3. Kumari R. C. Manchester, M.A. (Bryn Maur), Reader (I. T. C.)
  4. Ch. Mohd. Sultan, M.A. (Luck.), Lecturer (*on leave*).
- Dr. S. R. Nigam, M.A., PH.D., Temp. Lecturer.

*\*NOTE.—*The Head of the Departments of Arabic and Persian & Urdu will conduct seminar work with Honours and M.A. students of Muslim India.



5. Capt. A. L. Loomba, M.A. (Luck.), Lecturer (*Appointed Lecturer in Military Science*).  
Shri Bhaiyaji Gupta, M.A., Temp. Lecturer.
6. Dr. G. N. Dhawan, M.A. (Agra), M.A., LL.B., PH.D. (Luck.), Lecturer.
7. Dr. P. N. Masaldan, M.A., PH.D. (Luck.), Lecturer (*on leave*).  
.....Temp. Lecturer.
8. Dr. R. B. Das, M.A., PH.D., Lecturer.
9. Dr. Indra Datt Sharma, M.A., PH.D. (Luck.), Lecturer.
10. Dr. D. Y. Gohokar, M.A., LL.B., D.LITT., B.S.F.S., Lecturer.
11. Kumari Vanita Wanchoo, M.A., Teacher (I. T. C.)
12. Shrimati K. Shukla, M.A., Teacher (M. V. C.)
13. Shrimati S. K. Gupta, M. A., Teacher (K. H. C.)

#### *Economics and Sociology—*

- \*1. Dr. Shri Radha Kamal Mukerjee, M.A., PH.D. (Cal.), Premchand Roychand Scholar, Professor.
- †2. Shri D. P. Mukerji, M.A. (Cal.), Professor.
3. Dr. D. N. Majumdar, M.A. (Cal.), PH.D. (Cantab.), F.R.A.I., F.N.I., Premchand Roychand Scholar, Professor of Anthropology.
4. Dr. Baljit Singh, M.A., LL.B., PH.D., D.LITT., Reader.
5. Shri Murli Dhar Joshi, B.A. (Hons.), M.A. (Alld.), Lecturer.
6. Shri Prakash Chandra, M.A. (Luck.), Lecturer.
7. Dr. Arun Kumar Ghosh, M.A. (Alld.), PH.D. (Lond.), Lecturer (*on deputation*).  
Dr. S. D. Misra, M.A., PH.D., Temp. Lecturer.
8. Dr. Nasir Ahmad Khan, M.A., PH.D. (Luck.), Lecturer.
9. Shri Sewa Ram Sharma, M.A., LL.B. (Luck.), Lecturer.
10. Shri Avadh Kishore Saran, M.A., Lecturer.
11. Shri D. N. Gurtu, B.A. (Alld.), B.SC. (HONS.) (Lond.), F.R.E.S., Lecturer.
12. Shri Krishna Chandra G. Seth, M.A., Lecturer.

\*Head of the Department upto September 29, 1951.

Research Professor from September 30, 1951 upto April 30, 1953.

†Head of the Department from September 30, 1951.



13. Shri Dilip Kumar Sen, M.Sc. (Cal.), Lecturer.
14. Shri Anand Krishna, M.A., Teacher (I. T. C.)
15. Kumari Kathleen Misra, M.A. (Luck.), Teacher (I. T. C.)
16. Shrimati Sarah Verghese, M.A. (Luck.), Teacher (M.V. C.)
17. Shrimati Hamida Salim, M.A., B.T., Teacher (K.H.C.)
18. ....Teacher (K.H.C.)

*J. K. Institute of Sociology and Human Relations.*

1. Dr. Radha Kamal Mukerjee M.A., PH.D., P.R.S., Director.
2. Shri Sushil Chandra, M.A., LL.B., Lecturer.
3. Shri Vir Bahadur Singh, M.A., Lecturer.

*Arabic—*

1. Dr. Mohammad Wahid Mirza, M.A. (Punj.), PH.D. (Lond.), Reader.
2. Dr. Abdul Aleem, B.A. (Hons.) (Jamia Millia Islamia.), PH.D. (Berlin), Lecturer (on leave).  
Dr. Mustafa Hasan Alavi, M.A., PH.D., H. P., FAZIL, MULLA, Offg. Lecturer.
3. Dr. Shamsheer Bahadur Samadi, M.A., PH.D., DABIR-I-KAMIL Lecturer.

*Persian and Urdu—*

1. Syed Masud Hasan Rizavi, M.A. (Luck.), Reader.
2. Shri Ale Ahmad Suroor, M.A., Reader.
3. Syed Yusuf Husain Mosvi, M.A. (Luck.), Lecturer.
4. Syed Ehtesham Husain, M.A. (Alld.), Lecturer.
5. Dr. Nurul Hasan Hashmi, M.A. (Luck.), M.A., PH.D. (Alig.), Lecturer
6. Syed Mohammad Taqi, M.A., LL.B., I.T., Lecturer.
7. ....Lecturer.
8. Syed Murtaza Husain Rizvi, M. A. (Luck.), Teacher (I.T.C.)
9. Shrimati Razia Sajjad Zaheer, M.A., Teacher (K.H.C.)
10. ....Teacher (K.H.C.)

*Sanskrit and Prakrit Languages—*

1. Shri K. A. Subramania Iyer, M.A. (Lond.), Professor.
2. Dr. Kanti Chandra Pandey, M.A., M.O.L. (Punj.), PH.D., D. LITT. (Luck.), Reader.



3. Dr. Satya Vrat Singh, M.A., PH.D. (Luck.), Lecturer.
4. Shri A. C. Banerjea, M.A., Lecturer (*on leave*).  
Shri H. C. Joshi, M.A. Temp. Lecturer.
5. Shri D. N. Shukla, M.A., (Luck.), M.A. (Agra), Sahityacharya, Sahityaratna, Lecturer.
6. Pandit G.P. Dikshit, M.A., Lecturer.
7. Shrimati C. Sinha, M.A., Teacher (I.T.C.)
8. Kumari Indujalata Shukla, M.A., Teacher (I.T.C.)
9. Shrimati Pratibha Tewari, M.A., LL.B., Teacher (M.V.C.)

**Hindi—**

1. Dr. Din Dayal Gupta, M.A., LL.B. (Luck.), D.LITT. (Alld.), Professor.
2. Dr. Kesri Narain Shukla, M. A., D.LITT. (Ben.), Reader.
3. Dr. Bhagirath Mishra, M.A., PH.D., Lecturer.
4. Shri Hari Krishna Avasthi, M.A., Lecturer.
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5. .... Reader.

\*Head of the Department upto September 29, 1951.

Research Professor from September 30, 1951 upto April 30, 1953.

†Head of the Department from September 30, 1951.

\*\*Also Dean, Faculty of Science, upto September 11, 1951.



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8. ....Senior Demonstrator.
9. ....Senior Demonstrator
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2. Maulvi Syed Ali Naqi Naqvi, Fazil-i Adab, Mumtazul-Afazil, Sadrul-Afazil, Second Maulvi (*Offg. First Maulvi*).
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*Anthropology Department—*

Shri Shivendra Bahadur, M.A.

*Public Finance Research Project—*

1. Shri Daya Shanker Sarin, M.A.
2. Shri Jeet Ram Gupta, M.A.

*Chemistry Department—*

Shri Hansraj Loda, M.Sc.

Shri D. D. Mukerji, M.Sc.,

*Helminthiasis Scheme—*

1. Kr. Suresh Singh, M.Sc., Junior Research Officer.
2. Shri Rama Shanker Tandon, M.Sc., Research Assistant.

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\*Recognised as Teachers for purposes of supervising the work of the Research scholars of the Ph. D. Class in Botany working in the Institute.



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*Botany and Geology Department—*

1. Kumari Rachel John, M.sc.
2. Shri K. P. Vimal, M.sc.
3. Shri Daya Nand Pant, M.sc.
4. Shri Sultan Ahmad Khan, M.sc.

*Scheme for the Measurement of Geological Time—*

1. Shri R. N. Lakhanrai, M.sc.
2. Shri D. C. Bhardwaj, M.sc.

*Zoology Department—*

1. Shri Satendra Khera, M.sc.
2. Shri K. C. Sanwal, M.sc.
3. Shri S. P. Gupta, M.sc.
4. Shri S. C. Baugh, M.sc.

*Mathematics of Department—*

1. Shri Amar Nath Avasthi, M.A.
2. Shri Chandra Pandey, Ganita Jyotishacharya.
3. Pt. Gopal Dwivedi, Ganita Jyotishacharya,
4. Pt. Markandey Mishra, Ganita Jyotishacharya, Kavya-Tirtha,

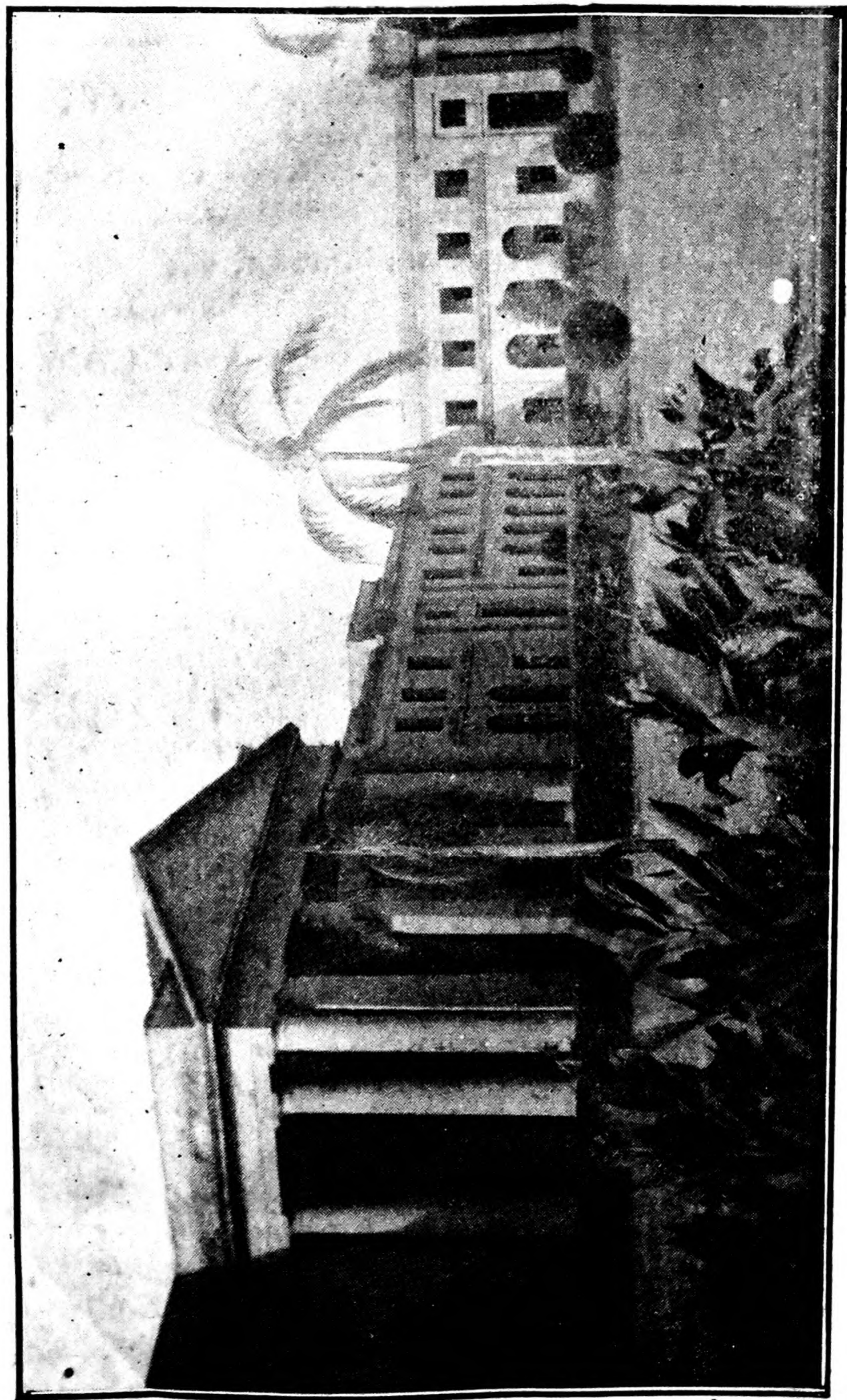
*Department of Anatomy—*

Shri Gagan Chandra.









ISABELLA THOBURN COLLEGE, LUCKNOW UNIVERSITY.



## CHAPTER I.

## ADMISSION OF STUDENTS.

(1) Admission of students to the University shall be made by an Admission Committee including at least one Principal and one Provost appointed for that purpose by the Academic Council.

Section 31 of  
the Act.

(2) Students shall not be eligible for admission to a course of study for a degree unless they have passed the Intermediate Examination of an Indian University incorporated by any law for the time being in force, or an examination recognised in accordance with the provision of this Section as equivalent thereto, and possess such further qualifications (if any) as may be prescribed by the Ordinances:

Provided that until such recognised examination be established, students who have passed an examination for admission instituted by the University in accordance with the Ordinances shall be eligible for admission.

(3) The conditions under which students may be admitted to the Diploma courses of the University shall be prescribed by the Ordinances.

The University shall not, save with the previous sanction of the Provincial Government, recognise (for the purpose of admission to a course of study for a degree), as equivalent to its own degrees, any degree conferred by any other University, or as equivalent to the Intermediate Examination of an Indian University, any examination conducted by any other authority.



**NOTE I.**—The following examinations have been recognised as equivalent to the Intermediate Examination of an Indian University, for the purpose of admission into the University:—

- (1) The Intermediate Examination of the Board of High School and Intermediate Education, U. P.
- (2) The Cambridge Higher School Certificate Examination.
- (3) The Intermediate Examination of the Board of Intermediate and Secondary Education, Dacca.
- (4) The Intermediate Examination of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior.
- (5) The Examination conducted by the Board of Secondary Education, United States of Madhya Bharat.
- (6) The Previous Examination of the Cambridge University.
- (7) The Responsions of the Oxford University.
- (8) The Intermediate Examination in Arts and Science of the Rangoon University for purposes of admission to the courses of study for the B. A. and B. Sc. degrees of the Lucknow University.
- (9) The Pre-Engineering Examination conducted by the Pre-Engineering Examination Board constituted by the Government of India, as equivalent to the Intermediate Science Examination for purposes of admission to the Lucknow University.



- (10) The Final Examination leading to the Licence of the State Medical Faculty, U. P., for purposes of admission of the Licentiates of the U. P. State Medical Faculty to the courses of study for the M.B.B.S. degree of the Lucknow University.

II.—The following Sanskrit examinations, with the English Examination of the Sanskrit Section in the Oriental Department, Lucknow University, or the Matriculation Examination in English of an Indian University established by Law, or of a Board of Education of any State in India, have been recognised as equivalent to the Intermediate Examination for purposes of admission to the Faculty of Medicine (Ancient and Modern):—

The Madhyama Examination of the Government Sanskrit College, Banaras, the Preliminary Examination for the Oriental Title of Shiromani of the Madras University, the Shastri Degree of the Lucknow University, the Shastri Examination of the Punjab University, the Shastri Examination conducted under the authority of the Government of Bihar and Orissa, or an equivalent examination of some other institution recognised by the University.

III.—The following examinations have been recognised as qualifying for admission to the Faculty of Commerce:—

- (1) The Intermediate Examination in Commerce of the Board of High School and Intermediate Education, U. P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior, or of the Nagpur University, or of the Patna University.



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- (2) The Commercial Diploma Examination of the Punjab University, or of the Education Department of Delhi, Ajmer-Merwara and Central India.
  - (3) The Intermediate Examination in Arts (Group B—Special) of the Delhi University or in Commerce under the Faculty of Arts of the Banaras Hindu University, or in Commerce of the Ali-garh Muslim University, or in Commerce of the Rajputana University, or in Arts (with Economics) or in Commerce of the Utkal University.
  - (4) The Intermediate Examination (Group E) of the Board of Intermediate and Secondary Education, Dacca.
  - (5) The Intermediate Examination of the Andhra University in three Commercial subjects. *viz.*, Accountancy, Banking and Economic, Geography or Mathematics.
  - (6) The Intermediate Examination of the Calcutta University with Accountancy and one other Commercial subject.
  - (7) The Intermediate Examination in Arts of the Madras University with Accountancy and one other Commercial subject.
  - (8) The Intermediate Examination or the B. A. Examination of any recognised University, or Intermediate Examination of the Board of High School and Intermediate Education, U. P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior, or of the Board of Intermediate and Secondary Education, Dacca, or of the Jammu and



Kashmir University, or the Examination conducted by the Board of Secondary Education, United States of Madhya Bharat, with Economics as one of his subjects, provided on joining the Commerce Faculty of the University, the candidate takes up Banking or Actuarial Mathematics for both the B. Com. Previous and Final Examinations.

- (9) Part I of the Associate Examination of the Indian Institute of Bankers after passing the Intermediate Examination of the Board of High School and Intermediate Education, U. P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior, or of the Board of Intermediate and Secondary Education, Dacca, or the Intermediate Examination of an Indian University established by an Act of the Legislature.
- (10) The All-India Senior Diploma Examination in Commerce conducted by the All-India Board of Commercial Studies, Delhi.

IV.—Students who have obtained one of the following three Diplomas of the Lucknow University in Oriental Studies and passed the Intermediate Examination in English only shall be eligible for admission to the B. A. courses of the University with Language subjects only (*i.e.* Group (*i*)—(*a*) English, (*b*) Hindi or Urdu, and (*c*) Arabic or Persian or Sanskrit:—

- (1) Acharya (2) Fazil (Arabic) (3) Dabir-i-Kamil (Parsain).

Students who have passed the B.A. Examination in the above Group of subjects will be permitted to go up



for their M.A. Examination in any of the subjects offered by them for the Bachelor's degree.

(NOTE.—When the courses for the Diplomas are re-modelled and include subjects corresponding to Intermediate courses in History, Economics, Civics, etc., the diploma-holders (having passed the Intermediate Examination in English only) will be eligible for admission to B.A. classes in all subjects).

1. Applications for admission to the University in the Faculties of Arts, Science, Law and Commerce shall reach the Registrar in the prescribed form on or before 5th July, along with necessary fees.

2. The Enrolment and Admission fees will not be refunded if the applicant declines to join after the Admission Card is issued.

3. Students seeking admission for the first time to the Faculties of Arts, Science, Law and Commerce shall be required to pay the Enrolment fee of Rs. 12 and the Admission fee of Rs. 4 before their applications can be considered. Students seeking admission to M. A. (or M. Com.) and LL.B. courses will be charged an additional Admission fee of Rs. 4.

4. All applications for admission to post-graduate classes from students already enrolled in the University must be accompanied by a deposit of Rs. 16, which will be credited towards their fees of the first term, but will be refunded only if admission is refused.

5. The number of vacancies shall be determined before the summer vacation.



6. (a) Under-graduates shall be admitted in the following order of preference:—

(i) 50% seats will be reserved for candidates from Oudh Colleges and residents of Oudh.

(ii) The remaining vacancies will be allotted to applicants according to merit, preference to be given to residents of United Provinces.

(b) Post-graduates shall be admitted in the following order of preference:—

(i) Lucknow University graduates (First and Second Class.)

(ii) First class graduates of other Universities.

(iii) Other graduates according to merit.

(NOTE.—Special consideration will be given to (a) Taluqdars and sons and daughters of Taluqdars of Oudh, (b) sons and daughters of individual donors of Rs. 20,000 or over, and (c) sons and daughters of teachers of the University).

7. Students who have failed in the second (or final) year, or have been detained in the first year, must apply on the prescribed form within the time limit laid down for applications by new students.

8. Applications for permission to appear at the competitive examination for admission to the Faculty of Medicine must reach the Registrar on the prescribed form accompanied by a fee of Rs. 30 on or before 19th June. The competitive examination for filling the declared number of vacancies will be held within the last week of June.



9. Candidates seeking admission to the Ph.D. and D.Sc. classes should fill up the prescribed admission form and submit the application to the Head of the Department concerned. If the Head of the Department and the Dean of the Faculty agree that the candidate should be admitted, the Registrar will admit him on receipt of the necessary fees, and report the matter to the Faculty at the next meeting.

No candidate will be ordinarily eligible for admission to these classes who have not taken at least a Second-class degree.

10. Candidates selected for admission to classes in which the accommodation is limited will be required to pay their Tuition fees for the first term within 10 days of the date of despatch of Admission Card by the Registrar. Such admissions will be automatically cancelled, if the fees remain unpaid on the 11th day after the despatch of the Admission Card, and vacancies created in this manner will be immediately filled up. This period of 10 days for payment of Tuition fees will, in no case, extend beyond the 20th July. A delay fine of annas four per day (subject to a maximum of Rs. 5) shall be charged (a) from new students who do not pay their fees by the first day of the session and (b) from those who apply after the University has re-opened.

11. All admissions shall be reported for approval to the Admission Committee in accordance with Section 34 (1) of the Act.

12. The course of Military Science shall be open to only selected members of the 6th (U. P.) Bn., N.C.C., and the selection will be made by a committee consisting of the Dean, Faculty of Arts, the Officer Commanding, the 6th (U.P.) Bn., N.C.C., the Second in Command,



the 6th (U.P.) Bn., N.C.C., and the Medical Officer, Canning College, which shall report to the Admission Committee.

13. The Admission Committee shall consist of :—

(1) The Principals of Colleges.

(2) The Deans of the Faculties.

(3) The Registrar (Convener).

Provided that in the case of admission of Post-graduates in all the Faculties, except in the Faculty of Medicine, the Heads of Departments concerned shall also be members of the Admission Committee.

14. Students shall not be eligible for admission in any academic year to a course for a degree unless they have complied with the conditions as prescribed by the Ordinances laid down for the various Faculties.

15. Students admitted in this University shall have to produce within the first term the Migration Certificate of the University from which they have passed the examination qualifying for admission\*. Those who have passed the qualifying examination conducted by bodies other than Universities shall be required to produce the Leaving Certificate of the College last attended, otherwise their names shall be struck off the rolls at the commencement of the second term.

16. The names of newly admitted candidates who fail to attend classes within the first ten days either from the beginning of the session or from the date of their admission, whichever is later shall be removed from the list unless leave has been granted before hand.

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\*The attention of new students is particularly drawn to this Regulation.



17. Students who fail twice in the under-mentioned examinations shall not be re-admitted to the same class:—

B.A. First year.

M.A. Part I.

B.Sc. First year.

M.Sc. Part I.

B. Com. Previous.

LL. B. Previous.

18. All students must obtain Identity Cards by supplying a photograph, size 2"×3", and paying a fee of annas four along with the Enrolment fee. Duplicate cards can be obtained on payment of a fresh fee. Photographs must be supplied to the Office of the Dean concerned by 1st August.



## CHAPTER II.

## RESIDENCE, HEALTH AND DISCIPLINE.

## A—Residence.

## I—GENERAL.

1. Every student on joining the University shall be assigned to a College or a Hall by the Admission Committee in consultation with the Principal of the College or the Warden of the Hostel or the Provost of the Hall, as the case may be.

2. Unless specially exempted, all students of the University in the Faculties of Arts, Science, Medicine and Commerce shall reside in a College or a Hall or under conditions approved of in each case by the Principal of the College or the Delegacy or the Provost of the Hall as the case may be.

3. Students who are living with parents or with guardians recognised as such by the Principal of a College or the Registrar or the Provost of a Hall may be exempted by him from residence in Hostels attached to the College or Hall.

The application for exemption shall be made in a prescribed form\* along with the application to join the University or, in the case of students already resident, at least one week before the end of the term after which they propose to cease to be resident.

4. Conditions of residence in a College or Hall may be determined by rules framed for the purpose by the individual College or Hall and approved of by the Residence, Health and Discipline Board and the Executive Council.

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\*The prescribed form is printed along with the "Application Form for Admission."



5 The lodgings of non-resident students shall be subject to approval by the Delegacy.

6. (a) Resident students, other than research students, shall be required as a qualification for admission to the Degree examination to have resided in a College for not less than 90 per cent of the number of days during which the College is in session in each academic year.

NOTE—(1) For the purpose of this Ordinance (i) attendance shall be reckoned from the fourth day of the session, except in the case of resident students who enter the hostel later, (ii) attendance shall be reckoned and incorporated in the returns up to one week before the commencement of the first written paper in the Degree examinations, and (iii) attendance shall not be reckoned during the following holidays: Dasehra, Diwali, Muharram, Holi and Christmas, or on the day preceding each of these.

(2) In the case of a resident student who by special permission of the Principal or the Warden concerned becomes non-resident the 90 per cent will be calculated up to the end of the term after which he becomes non-resident.

(3) When a student becomes resident during the currency of a term the 90 per cent will be calculated from the date of entry.

(4) When a student is by reason of illness in the Gandhi Memorial and Associated Hospitals, he shall not be deemed to be absent from the Hostel.

Provided that in exceptional cases and for sufficient reason shown, the Vice-Chancellor may condone a shortage of residence on the special recommendation of the Warden and the Principal\*.

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\*The Warden only in the case of Canning College.



6. (b) Resident graduate students in the Faculty of Medicine shall be required as a condition of admission to a hostel to be in residence for not less than 90 per cent of the number of days during which their course of instruction continues.

Regulations. 1. Resident students shall conform to the Regulations.

2. Non-resident students shall notify immediately to the Principal and the Registrar all changes of address of guardianship.

3. The lodgings of under-graduate students who do not reside in the University Hostel or with their parents or guardians shall be subject to the approval of the Delegacy.

4. As soon as possible after the opening of each session the Registrar shall forward to the Residence, Health and Discipline Board a statement showing:—

(a) the number of under-graduate resident students;

(b) the number of post-graduate resident students;

(c) the number of non-resident students living with parents;

(d) the number of non-resident students living with guardians;

(e) the number of non-resident students residing in lodgings.



5. Rooms in the Canning College Hostels shall be allotted in the following order of preference.—

- (i) To under-graduates.
- (ii) To M.A. and M.Sc. students.
- (iii) To LL.B. students.

6. Students suffering from any disease that may, in the opinion of the Medical Officer, be a source of infection or contagion will not be permitted to remain in a hostel.

7. No student will be permitted to reside in a hostel who is unwilling to submit to a medical examination.

8. Students who have been suffering from a contagious or infectious disease will only be re-admitted to a hostel on the Medical Officer's certificate that they are no longer a source of infection or contagion.

9. Cases under Regulations 6 to 8 *supra* shall be reported confidentially to the Vice-Chancellor for information.

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## II—HOSTELS.

### University Hostel Rules.

1. Each hostel is under the direct management of a Warden who is responsible to the Principal of the College, or the Vice-Chancellor.
2. The Medical College hostels are open to the students of the Medical Faculty only.
3. All students of the Medical Faculty, except those exempted by the Principal, shall reside in the hostels.
4. Students are admitted to the hostels by the Wardens and are not allowed to leave the hostels to reside elsewhere except with the written permission of the Principal concerned, or the Warden concerned in the Canning College.
5. Resident students of Canning College must show their hostel deposit fee receipts to the Warden before admission to a hostel.
6. Each student must occupy the room allotted to him for the session by the Warden, and no change of room may be made without his permission.
7. Subject to the direction of the Wardens, rooms may be reserved for the following session by resident students on a payment of Rs. 10, provided that applications to this effect are submitted to the respective Wardens before the termination of the current session.
8. Each resident student is responsible for the cleanliness and good order of his room and of the kitchen or servants' quarter allotted to him. He will be held responsible for any damage to the hostel property or furniture in his charge.



If any student leaves the hostel and fails to hand over in good order all the room furniture together with the electric bulbs, he will be liable to a fine and will have to pay for any damage done.

9. Residents are responsible for the loss or damage to electric fittings in their rooms.

10. In cases where rooms are found locked or left empty but the light switches are left open, a fine upto Re. 1 per day will be charged.

\*11. Electric lights in rooms will ordinarily be supplied from sunset to 11 P. M. and again between 4 A.M. and sunrise.

12. Students guilty of illegitimate use of current will be fined Rs. 48, in addition to the cost of repairs, and will be reported to higher authorities for severe disciplinary action.

13. (a) Residents shall make their own arrangements for food, but regular meals will be served in the dining-hall only where provided in the hostel. No meals shall be served in the rooms except in cases of illness when meals may be served in the rooms with the special permission of the Warden. Hours for meals in the mornings and evenings shall be fixed by the Wardens. Students coming outside meal hours shall not be allowed meals in the hostels.

(b) It is desirable that the Wardens and Assistant Wardens should take their meals in the common dining-hall once a week.

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\*This Regulation may be modified or suspended at the discretion of the Warden, provided the approval of the Principal or the Vice-Chancellor is previously obtained.



14. Residents should invariably lock their rooms even during temporary absence. They are warned against the risk of keeping valuables of any description in their rooms. Any loss should be immediately reported to the Assistant Warden, who will, if necessary, investigate the circumstances of the loss and will report to the Warden. In no case, however, will the hostel authorities be responsible for such loss.

15. All mess and private servants are under the control of the Warden who may punish them by fine or otherwise, or require them to leave the hostel.

16. Residents are strictly forbidden to utilize hostel servants as private servants or to strike, interfere with or abuse them in any way whatsoever. No excuse whatever will be accepted for a breach of this rule. All complaints against hostel servants should be brought to the notice of the Assistant Warden who will investigate the complaints and will report to the Warden if in his opinion, the offender deserved punishment.

17. No guest is allowed to stay in the hostel for the night except with the previous written permission of the Warden. The names of the students who have received such permission together with the amounts due from them shall be reported to the Honorary Treasurer, Lucknow University. No guest shall ordinarily reside in the hostel for more than one night.

A resident student shall not have more than one guest at a time and shall pay annas eight for the guest, if one is permitted to stay for the night.

18. There shall be maintained in each hostel a register to record the daily attendance of students which will be taken between 9 and 10 P.M.



19. Any student desiring to absent himself from the hostel after the roll-call shall obtain the written permission of the Warden or Assistant Warden.

20. A student who is absent from a hostel without leave may be fined a sum not exceeding Re. 1 per day by the Warden.

21. The gates, where provided in the hostels, shall be locked at 10 P. M.

22. No resident may leave the station without obtaining the permission of the Warden except at Moharram, Dasehra, Holi, Dewali, Christmas and the long vacation.

Medical students are subject to the leave rules prescribed for them in the Medical College.

23. The Assistant Warden shall be responsible for the discipline of the residents and shall supervise the general cleanliness of the hostel. He shall see that the hostel rules are observed and shall report to the Warden all matters affecting the discipline or welfare of the residents. He shall keep the hostel register and stock-book.

24. Any case of serious illness should be at once reported to the Warden.

No resident may approach any medical practitioner other than the Medical Officer-in-charge of his hostel except through his Warden.

The Assistant Wardens in the Medical College hostels will act as Medical Officers for their respective hostels and will attend to ailing students or advise their admission to the Hospital.

25. No meetings may be held in the hostels without the permission of the Warden.



26. Any students guilty of insubordination or conduct prejudicial to propriety or discipline is liable to summary expulsion from the hostel.

27. Wardens are empowered to associate not more than ten non-resident under-graduate students with each hostel on payment of Rs. 6 per annum (to be collected with Tuition fees) in addition to the usual amounts payable by residents for membership of the Hostel Social Union, Hostel games, etc.

Such associated students will be subject to the disciplinary control of the Warden within the hostel. They may join a hostel mess if they so desire, under the same conditions as residents.

Students wishing to avail themselves of this privilege must apply to the Wardens of the Canning College.

28. Except at the end of a session a resident must give at least 15 clear days' notice of his intention to vacate his room and shall be deemed to be resident until this period expires.

29. A student who is resident for a part of any month shall be charged rent for the whole month.

30. The Warden shall have the power to fine a student upto the extent of Rs. 50 or expel from the hostel or both.

31. A student expelled from one hostel shall not be admitted in any other hostel.

32. A student expelled from one College or hostel of the University shall not be admitted to any other College or hostel of the University.



33. A Committee of the Wardens shall be set up, and the Convener appointed by the Vice-Chancellor, to enforce discipline in hostels and discuss other administrative matters.

34. A meeting of this Committee shall be held at least once in every term or whenever necessary.

35. The duty of this Committee will be to co-ordinate the activities of all the hostels.

36. Any question not covered by these rules shall be decided by the Warden.

### **Rules for Resident Women Students.**

1. Except as noted in Rule 2, no resident of the hostel may be absent from the hostel without the permission of the Warden.

Members wishing to visit friends or relations even on holidays shall obtain the permission of the Warden.

2. Residents wishing to be absent from the hostel after 7 P. M., except on duty, shall obtain a permit from the Warden, shall sign a register kept by the Warden stating where they will be going, and shall be back in the hostel by the time mentioned in the permit. Permits to leave the hostel may ordinarily be obtained from the Warden between 5 P. M. and 6 P. M.

3. Residents may be allowed to go out in groups of two or three according to the places to which they go.

4. Residents wishing to spend week-ends out must have written permission from home authorising the Warden to allow them to do so. The authorisation will be filed, and residents will be allowed to go only to the houses of the people mentioned.



5. Men visitors may ordinarily visit residents from 4-30 P. M. to 6 P. M. in winter and from 5 P. M. to 7 P. M. in summer, on Mondays, Wednesdays and Saturdays only.

Residents who wish to have such visitors must have written permission from home, which the Warden will file and only these visitors will be allowed to call.

Men visitors are not allowed in residents rooms. They may be seen only in the verandah or the visitors' room.

6. No guests may be entertained without the previous permission of the Warden. Only women guests are allowed. No guest shall ordinarily reside more than one night. A charge of eight annas per night will be made for each guest. Meals will be charged for at fixed rates.

7. Lights must be turned out at 11 P. M., and are not allowed between 11 P. M. and 4 A. M.

8. All lights and fans must be switched off when leaving the rooms, otherwise a fine, not exceeding a rupee, will be charged each time.

9. Students must not visit one another's room after 8-30 P. M. and silence must be observed during study hours.

10. No hostel servant may be disciplined by any student, nor may servants be sent on errands without the permission of the Warden.

Complaints should be made to the Warden when necessary.

11. Illness must be reported to the Warden at once.

12. Residents of the hostel are expected to use all hostel articles with care. Breakages will be charged for.



13. Residents are expected to abide by these rules, and to show courtesy and consideration for others. Punctuality at meals is a form of courtesy.

14. Any question not covered by these rules shall be decided by the Warden.

### KAILASH HOSTEL RULES.

#### General:

The Kailash Hostel for women students of the Lucknow University is close to the University and can accommodate about 45 students.

#### Management:

The Hostel is under the direct management of a Warden, who is responsible to the Vice-Chancellor. There is also an Advisory Committee to help with advice. The Matron and student prefects will also help the Warden in the management of the Hostel.

#### Admission:

1. Students are admitted to the Hostel by the Warden.

2. All applications for hostel accommodation should be accompanied by a character certificate from the Head of the Institution last attended by the applicant.

3. A student expelled from one hostel shall not be admitted to any other hostel.

4. A student expelled from one College of the University or hostel shall not be admitted to any other College or hostel of the University.

5. Resident students of Canning College must show their hostel deposit fee receipts to the Warden before admission to the Hostel.



6. Each student must occupy the room allotted to her for the session by the Warden, and no change of rooms may be made without her permission.

### Re-admission :

Subject to the direction of the Warden, rooms may be reserved for the following session by resident students on a payment of Rs. 8, provided that an application to this effect is submitted to the Warden before the termination of the current session.

### Hostel Responsibilities :

1. Each student should contribute towards the discipline and good tone of the Hostel. Prefects and other student officers, such as Games Secretary, should help the Warden and Matron in the efficient running of the Hostel, the maintenance of discipline and the fostering of a good atmosphere in the Hostel.

2. Each resident is responsible for the cleanliness and good order of her room.

3. She will be held responsible for any damage to the Hostel property in her charge, and shall have to pay for damages. Residents are responsible for the loss or damage to electric fittings in their rooms. In cases where rooms are found locked or left empty, but the light switches are left open, a fine up to Re. 1 per day will be charged. Electric lights in rooms will ordinarily be supplied from sunset to 11 P. M. and again between 4 A. M. and sunrise. Students found guilty of illegitimate use of current, will be fined Rs. 48 in addition to the cost of repairs and will be reported to higher authorities for severe disciplinary action.



4. Resident should invariably lock their rooms even during temporary absence. They are warned against the risk of keeping valuables of any description in their rooms. Any loss should be immediately reported to the Warden. In no case, however, will the Hostel authorities be responsible for such loss.

5. No meetings may be held in the Hostel without the permission of the Warden.

6. Notices that residents desire to put up on the Notice Boards or circulate among the residents should be countersigned by the Warden.

7. Any student guilty of insubordination or conduct prejudicial to propriety or discipline is liable to expulsion from the hostel.

8. The students' Common Room is not to be used for the purpose of sleeping.

9. A second fan in this room may be used only if there are more than six students in the room.

10. Newspapers and periodicals that are common property should not be removed from the Common Room.

11. Letters coming both by post and personal messenger will be received by the Warden for the students.

12. No private tuition is allowed in the Hostel.

13. Hostel residents should not stop their vehicles in the porch of the Warden's bungalow, nor use this porch as a passage when going in and out of the Hostel.

14. Except at the end of a session, a student must give 15 days' notice of her intention to leave the Hostel.

15. A student who is resident for part of any month shall be charged rent for the whole month.



16. No servant may be disciplined by any student.

17. No verbal messages are to be sent through servants to either the Matron or the Warden.

18. Servants may not be used by the students without the permission of the Warden for the University servants, and that of the Matron for the mess servants.

### **Hostel Attendance :**

1. There shall be maintained a register of daily attendance of students which will be taken at 8 P. M. in the summer months and at 7 P. M. during the winter months.

2. No student is allowed to appear at an University examination unless she has kept 90% Hostel attendance.

8. The Hostel will be closed for the summer months. Students should leave the Hostel within three days of completing their examination.

### **Going-Out Privileges :**

Excepting for attendance at classes in the University no student may leave the Hostel without the previous permission of the Warden.

2. Late nights up to 10 P. M. will be allowed twice a month. Cinema going is permitted twice a month.

3. For pictures, shopping, etc., students should go out in groups of three or more.

4. Excepting for the two late nights allowed they should be back in the Hostel before the roll call.

5. Students may spend week-ends at places authorised in writing by parents. They should in such cases be escorted by authorised persons.



6. Every resident must sign her name in the attendance register in the presence of the Prefect in the Common Room. In the summer months *i.e.* 16th July to end of October and from March 15th to April 30th, the roll-call will be taken at 8 P. M. and at 7 P. M. during winter in the remaining months of the session.

7. No student may leave the Hostel after the roll-call without the Warden's permission.

8. Permission for going out must be obtained from the Warden during hours fixed by her.

9. Except for duty no resident may leave the premises without signing the out-going register (duty will mean regular lectures only).

#### Visitors:

1. Men visitors may visit residents from 4-30 P. M. to 6 P. M. in winter and from 5 to 7 P. M. in summer on Mondays, Wednesdays and Saturdays only.

2. Residents who wish to have such visitors must have written permission from home, and only those visitors will be allowed to call.

3. The visitors should sign the Visitors Register giving the details required.

4. Women visitors may be taken to the students' rooms, but men visitors must be seen in the verandah and Visitors' room.

#### Medical Attendance, etc.

1. No student will be permitted to reside in the Hostel who is unwilling to submit to medical examination.

3. All cases of illness must be immediately reported to the Matron, who will inform the Warden.



3. For minor ailments students will be attended to by the compounder of the Canning College Dispensary who will come to the Hostel. If confined to bed, the Medical Officer will be called by the Warden to see the patient.

4. For serious cases of illness students are required to leave either for their homes if they are in Lucknow, or for Gandhi Memorial Hospital as in-patients where free treatment upto 10 days will be given.

#### **Mess Rules:**

1. The charges are Rs. 35 p. m. for non-vegetarian and Rs. 30 p. m. for vegetarian meals. These rates will be raised or lowered according to market rates.

2. A mess deposit of Rs. 30 per student will be collected which is returnable when a student finally leaves the Hostel after deduction is made of outstanding claims against her.

3. The mess charges should be paid in advance before the 15th of each month during the hours fixed by the Matron.

Fines at the rate of two annas per day upto the 20th and 4 annas per day till the close of the month will be collected for late payment.

For non-payment thereafter, the student shall have to leave the hostel unless there are good reasons for the delay.

4. Two students per month will be required to help in checking the mess accounts and making the monthly statements.

5. Mess servants are to be paid full salaries for the summer holiday months also.



6. Reduction for absence at the rate of 12 annas per day will be made only if the absence is for a week or more consecutive days, provided notice is given to the Matron in time.

7. All extras have to be paid for.

8. Special diet will be provided only for those who are ill.

9. Residents should be punctual for meals.

10. Students should not remove crockery, etc. from the dining room.

11. Meals will be served in the rooms only in cases of illness and with the permission of the Matron.

12. Breakages and losses have to be paid for.

#### Guests:

1. Students may have occasional women guests for 3 days at a time with the previous permission of the Warden. A resident student shall not have more than one guest at a time.

2. Guests should conform to the Hostel rules.

3. The arrival and departure of guests should be recorded in the Guest Book.

4. Guest charges will be at the rate of Re. 1-4-0 per day. Charges for separate meals will be made if the guest stays for less than 24 hours. These will be at the rate of annas 3 for chota, annas 8 for lunch, annas 5 for tea and annas 8 for dinner.

In addition to this annas 8 for every night that the guest stays in the Hostel is payable to the University.

The Hostel will be responsible for the payment of these various charges.



### Additional Rules for Residents of King George's Medical College Hostels.

1. No senior student will visit the Hostel meant for junior students during the first term without the permission of the Wardens of either Hostel.

2. The Wardens of either Hostel should be authorised to take disciplinary action against any student who is found to be guilty of breach of this rule.

3. Any misbehaviour by a senior student towards a new comer should be reported to the Principal for entry in the personal record of the offender by any teacher who happens to witness the incident, if it occurs outside the Hostel premises.

4. The Principal will take adequate disciplinary action against such offender in consultation with the reporting teacher and the Warden concerned.

5. Disciplinary action will be of the nature of either fine or expulsion according to the nature of the offence committed.

6. A student who has been punished in connection with the activities against the new comers will be debarred from holding any House or Teaching appointment.

7. Any House Officer participating in such activities will be reported to the Hospital Board for severe disciplinary action.

8. In the interest of discipline of the under-graduates, it is imperative that no member of the Hospital staff will be allowed to reside within the Hostel.

9. The privilege of residence in a Hostel may, however, be extended to post-graduate students not holding any appointment in either the Gandhi Memorial and Associated Hospitals or the King George's Medical College.



## Medical College Leave Rules.

### Leave Rules for 1st and 2nd Year Students.

#### *I.—Special Urgent Leave.*

#### FOR LEAVE UPTO 10 DAYS.

##### (a) In the case of Hostellers:—

- (i) The student will apply to the Warden on the prescribed forms obtainable from the Block Monitor.
- (ii) The Warden shall send all the sanctioned application forms to the Assistant Warden who shall enter the period for which leave has been granted in the Hostel Attendance Register's Remarks column.
- (iii) On return from leave the student will report *personally* to the Assistant Warden of his arrival.
- (iv) The Assistant Warden will send to the Principal for record once a month a list of students granted leave (by the 7th of each month).
- (v) Cases of over-stayal of leave or of absence without Warden's sanction shall be reported by the Assistant Warden to the Warden who may fine a sum not exceeding As. 0-8-0 per day and shall send the list to the Principal for collection (on Form 'A').

##### (b) In the case of Non-Hostellers:—

- (i) The student will apply for leave to his Tutor who will grant the requisite leave.



- (ii) On return from leave the student will report *personally* to the Tutor that he has resumed duty.
- (iii) The Tutor will send once a month (by 7th of each month) to the Principal the list of students granted leave, for record.
- (iv) Cases of over-stayal of leave or absence without Tutor's sanction shall be reported by the Tutor to the Principal (on Form 'A') who may fine the student concerned a sum not exceeding As. 0-8-0 per day.

#### FOR LEAVE FOR MORE THAN 10 DAYS.

All such applications will be forwarded by the Warden or the Tutor as the case may be, with their recommendations, to the Principal for disposal.

#### II.—*Sick Leave.*

A sick resident student will report to the Assistant Warden, who will, if Hospital admission is necessary, issue a slip to the Medical Officer on duty without which a student will not be admitted.

On the day of discharge from the Hospital the student shall report personally to the Assistant Warden, before resuming residence in the Hostel. List of such students will also be sent to the Principal once a month (by 7th of each month) for record.

Non-resident students will apply, with medical certificate, to their Tutors for grant of sick leave, who with his necessary recommendation will forward the application to the Principal for necessary action.



### *III.—General.*

1. Entry regarding over-stayal of leave or absence without leave shall be made in the student's College Record Register which is consulted when leaving or other certificates are granted and when House and other appointments are made.

2. The grant of leave under the above conditions does not exempt a student from putting in the necessary percentage of the College Class and Clinical Attendances required by the Regulations.

### **Leave Rules for III, IV and V Year Students.**

#### *I.—Special Urgent Leave.*

#### **FOR LEAVE UPTO 10 DAYS.**

(a) In the case of III and IV year the student will present to the Physician or Surgeon, under whom he is working and in the presence of the House Officer concerned, his application for leave on the prescribed form, obtainable from the House Surgeon or House Physician concerned, and at the same time give in writing the name of the substitute who will work for him. After obtaining the officer's signature of sanction he will leave the form with the Assistant Warden, if hosteller, and with the Tutor, if non-hosteller.

(b) In the case of V year students, leave will be granted by the Warden, if hosteller, and by the Tutor, if non-hosteller. In emergencies or on Sundays, or when the Physicians or Surgeons are not available, the Warden or Assistant Warden or Tutor may sanction



the leave provided the substitute is known to him to be available. When the Warden or Assistant Warden or Tutor thus sanctions leave he shall inform the Physician or Surgeon concerned not later than the following day.

After sanction of leave the Assistant Warden shall record the days for which leave has been granted in the Hostel Attendance Register, and initial in the Remarks column. The Tutor will note the leave against the students' name in the Register of Assignees.

On return from leave the student will report *personally* to the Assistant Warden or the Tutor who will intimate to the Principal once a month (by the 7th of each month) the period for which the student was on leave.

Cases of over-stayal of leave or absence without leave will be reported by the Physician or Surgeon concerned to the Principal who may fine the students concerned not exceeding Re. 1 per day.

#### FOR LEAVE FOR MORE THAN 10 DAYS.

All such applications from III and IV year students will be forwarded by the Physician or Surgeon concerned and from V year students by the Warden or Tutor concerned with his recommendations to the Principal for disposal.

In emergencies or on Sundays, or when the Physicians or Surgeons are not available, the application may be submitted to the Warden or the Assistant Warden or the Tutor, as the case may be, who will forward the same to the Physician or Surgeon concerned for necessary recommendation and transmission to the Principal for disposal.



The leave thus granted will be intimated by the Principal to the Assistant Warden or the Tutor, as the case may be, for record.

## *II.—Sick Leave.*

(i) A resident student on going sick will report to the Assistant Warden, who will, if Hospital admission is necessary—

(a) issue a slip to the Medical Officer on duty, without which a student will not be admitted;

(b) send information to the House Officer or the Physician or Surgeon under whom he is working, either about his admission to the Students Ward or his being treated in the Hostel.

(ii) On the day of discharge from Hospital, the student shall report *personally* to the Assistant Warden, before resuming residence in the Hostel.

The Assistant Warden will send to the Principal (by the 7th of each month) a list of students granted sick leave, for record.

(iii) A non-resident III and IV year student must send a certificate of illness signed by a registered medical practitioner in support of a sick leave application to the Physician or Surgeon under whom he may be working. The certificate will show clearly the number of days of leave recommended. The House Officer concerned will make the necessary entries in the Ward Attendance Book and forward the application to the Tutor. The Tutor will forward to the Principal (by the 7th of each month) a list of students granted sick leave, for record. Non-resident V year students will send their sick leave applications duly supported by a medical certificate signed by a



registered medical practitioner to the Principal who will grant the requisite leave and intimate the Tutor and the Officer concerned.

*A student unable to carry out special Hospital duties, etc., on account of sickness will inform the Resident Medical Officer or Resident Surgical Officer immediately through the Assistant Warden and Tutors, if hosteller, otherwise direct, in time for his Hospital duties to be satisfactorily arranged.*

#### *IV.—Dasehra or Christmas Recess.*

Students desiring Dasehra or Christmas leave will approach the Physician or Surgeon under whom they are working, 10 days before the recess, through the House Officer concerned, who will divide them into 2 batches, batch 'A' for duty during first-half and batch 'B' for duty during second half. These lists, countersigned by the Physician or Surgeon, will be submitted by the House Officers concerned to the Assistant Warden and Tutors, who will mark the actual number of days granted in the Hostel Attendance Register with his initials in the Remarks column, and forward the list to the Dean's Office for record.

A copy of the leave arrangement will be supplied to the Resident Medical Officer or Resident Surgical Officer by the House Officer concerned.

#### *V.—Vacational Leave.*

Students may be granted Vacational leave for not more than one month in batches by the Physician or Surgeon under whom they are working. The list of students doing duty in each month will be prepared by the House Officer before the 15th April, each year, and will be published by the Dean on intimation by the Physician or Surgeon concerned. A copy of the list will be



sent to the Assistant Warden and Tutors. Any subsequent authorised charge of duty will be notified at once to the Assistant Warden, Tutors and the Dean by the House Officer concerned.

*VI.—Leave for Maternity and Mental Diseases.*

*Training-Outstation.*

The Dean will forward to the Assistant Warden and the Heads of the Departments concerned a list of students detailed for the training showing the authorised dates of departure and return, for entry in their attendance registers.

*VII.—General.*

1. Whenever leave is granted by a Physician or Surgeon the House Officer concerned will mark 'L' (Leave) against that student's name in the Ward Attendance Book on each day of the student's authorised leave.

2. Entry regarding over-stayal of leave or absence without leave shall be made in the student's College Record Register which is consulted when leaving or other certificates are granted and when House and other appointments are made.

3. Recess or vacation leave may be withheld on a subsequent occasion of the students over-staying their leave or being absent without leave.

4. The grant of leave under the above conditions does not exempt a student from putting in the necessary percentage of the College Class and Clinical Attendances required by the Regulations.



### Rules for Students' Electric Fans in Hostels.

1. Permission for use of table fans will be allowed for the following periods only:—

(a) 15th March to 30th April in Canning College on Rs. 9.

(1) 1st April to 30th April in the Medical College on Rs. 6.

(2) 1st May to 31st May in the Chakravarty Hostel, Medical College, on Rs. 6.

(3) 1st June to 30th June in the Chakravarty Hostel, Medical College, on Rs. 6.

(4) 1st July to 31st July in the Chakravarty Hostel, Medical College, on Rs. 6.

(b) From the commencement of the session to the end of the first term, or until 15th October, whichever is earlier, at Rs. 6 per month or part of a month.

In the Faculty of Medicine fans will be allowed until September 30, on payment of Rs. 12 and until October 15, on payment of Rs. 15.

(c) Fans may be permitted by the Wardens for one calendar month only during the period mentioned under (b) above on payment of an extra fee of Re. 1, or in other words Rs. 7 for either the month of August or September.

In the case of women students residing in the Kailash Hostel Rs. 2 per student (with a minimum of Rs. 5 per mensem) will be allowed by the University out of the room-rent paid by her, as her contribution towards the



common electric charges. This is approximately the charge for electricity per student in the men's hostels. The remainder of the electric current bill shall be divided between the Warden and those students who use the fans in their private rooms during the month when fans are used in the proportion of two to one for the Warden and each student using a fan. During the season when no fans are used in private rooms the balance of the bill will be paid by the Warden.

(*N.B.*—No concession for a part of a month will in any case be allowed.)

2. The fan fees will be payable in advance.

3. Application for table fans must be submitted—

(*a*) in the case of Canning College to the Warden before the beginning of the session and applicants will be required to reside in rooms fitted with fan connection;

(*b*) in the case of the Gokaran Nath Misra Hostel, Medical College, to the Warden by the 20th March and 3rd August for II year students and 30 March and 7th August for I year students for the periods 1st April to 30th April and 1st August to 30th September or 15th October respectively;

(*c*) in the case of the Chakravarty Hostel, Medical College, to the Warden by 20th March, 20th April, 1st June, 1st July and 1st August, for the periods from 1st April, 1st May, 1st June, 1st July and 1st August respectively.



4. The Warden, G. N. Misra Hostel, will send a complete list of applicants for fan connection by 22nd March and 5th August and 9th August for the periods 1st to 30th April and 1st August to 30th September or 15th October respectively, to the Principal, King George's Medical College.

The Warden, Chakravarty Hostel, will send a list of applicants for fan connection on 22nd March, 22nd April, forenoon of 2nd June, 2nd July and 2nd August, for the respective periods mentioned in Rule 1, to the Principal, King George's Medical College.

5. Gokaran Nath Misra Hostel students should deposit fan fee by 25th March, 6th August and 10th August and Charavarty Hostel students by 25th March, 25th April, 2nd June, 2nd July and 2nd August.

NOTE—Names of students who do not pay fan fee by the fixed dates will be struck off the list.

6. Students applying or paying after the dates mentioned will be charged an extra fee of Re. 1.

7. Students who pay fan fee should be located in wired rooms and those who have not paid or do not intend to pay should be located in unwired rooms as far as possible.

8. Students will provide their own table fans, the length of blades of which should not exceed 16 inches.

9. Any student detected using a table fan or any other electric appliance at unsanctioned period and without permission will be liable to a fine of Rs. 25 and confiscation of the fan or other electric appliance so found.

10. Payments once made cannot be refunded nor permission can be granted for shifting fan connection from one student's room to another student's room.



No concession will be made for absence during part of a month on leave, sickness, or duty at Agra in case of medical students.

11. Inspections will be made by the Assistant Wardens to see that no unauthorised use of electricity is made by students.

### **VIJAYA LAKSHMI HOSTEL**

#### **King George's Medical College.**

A hostel for Lady Students was opened from 1st August, 1940, with accommodation for six women students. Six rooms and a common room were added to the Hostel from the session 1941-42—later sixteen more rooms were added to the Hostel. The Hostel is situated within the compound of the King George's Medical College.



## III.—DELEGACY.

1. The Delegacy shall consist of the following members\* :—

- (i) The Vice-Chancellor, President (*ex-officio*).
- (ii) The Hony. Treasurer.
- (iii) Two members nominated by the Court.
- (iv) Two members nominated by the Executive Council.
- (v) Two members nominated by the Academic Council.
- (vi) One member nominated by the Residence, Health and Discipline Board.
- (vii) Teachers in-charge of Delegacy Centres.
- (viii) The Registrar.
- (ix) The Secretary, Canning College Athletic Association.
- (x) The Medical Officer-in-charge of the health of students or any other Medical Officer appointed from the staff of the University.
- (xi) One representative of the Executive Committee of the Lucknow University Union.
- (xii) The Proctor, Secretary (*ex-officio*).

2. The object of the Delegacy shall be to control as far as may be practicable the conditions of residence and to promote the welfare of such students of the University as are not resident in or attached to a College or a Hostel recognised or maintained by the University.

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\*The nominated members of the Delegacy will hold office for a period of two years.



Subject to the control of the Executive Council it shall have such powers and duties as may be necessary for this purpose.

3. The Delegacy may frame regulations for the conduct of such students and shall take such steps as it may consider best suited to promote the physical, social and moral welfare of the students under its charge.

Such regulations shall be subject to the approval of the Residence, Health and Discipline Board.

4. The Delegacy shall maintain a register of the names and addresses of all its students, with particulars of courses of study undertaken, and the name and address of the guardian in each case.

5. The Delegacy may forbid residence in any house, building or area deemed unsuitable for the residence of students without assigning any reason.

6. The Delegacy shall maintain and supervise one or more centres for the promotion of social welfare among non-resident students, and direct social and other activities in connection therewith.

7. Each non-resident male student\* shall be required to pay a Delegacy fee of Rs. 8 annually in six instalments along with the University Tuition fee. The sums realised shall be credited to the Delegacy Fund, and shall be expended for the purposes of the Delegacy.

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\* (i) Those who are in receipt of full freeships will pay only half the Delegacy fee, i.e., Rs. 4 instead of Rs. 8.

(ii) Those who are in receipt of half-freeships will pay only three-quarters of the Delegacy fee, i. e., Rs. 6 instead of Rs. 8.

These exemptions will not apply to students of Ph. D. and D.Sc. degrees who are exempted from payment of Tuition fees.



8. An annual statement of income and expenditure shall be drawn up by the Delegacy for submission to the Executive Council at the end of each financial year.

### B.--Health and Physical Training.

#### Health.

Regulations 1. Every student applying for admission to a Hostel shall be required to produce with his application form a medical certificate, either from the Medical Officer of the University or from any qualified medical practitioner, to the effect that the applicant is free from any disease that would disqualify him from residence in a hostel.

\*2. (a) Every student of the University shall be examined annually, latest by 30th November, by the Medical Officer as to his physical fitness.

Students not appearing for the Medical examination on the prescribed date shall be fined Rs. 2 in the first instance, with the warning that their names will be struck off the rolls of the University on their failure to get themselves examined before 30th November. The names of such students, who fail to get themselves examined upto 30th November shall be struck off the rolls of the University.

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\*The Proctor shall make necessary arrangements and take action in connection with medical examinations of the students in the Canning College (*vide* Resolution No. 3 of the Residence, Health and Discipline Board dated March 14, 1950).



(b) The Medical Officer will classify students in three classes:—

A.—Exceptionally good health.

B.—Average health.

C.—Health below average.

(c) Students classed C will report to the Medical Officer at least once every term.

3. In each Hostel a Sick Report Book shall be maintained in an accessible position, in which students requiring medical attention shall enter their names and room numbers.

4. Each Hostel shall be visited by its Medical Officer at least once a week.

5. There shall be a Dispensary\* attached to each College.

6. The Medical Officer or his Assistant shall appoint special hours for seeing individual students and for the dispensing of medicines.

### Physical Training.

A system of compulsory physical training for all resident students has been introduced with effect from the session 1937-38 under the expert supervision of a qualified Director of Physical Instruction who is in-charge of (a) physical training and minor games, (b) training for track and field athletics (c) gymnasium, and (d) hygiene and health education in hostels.

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\* Non-resident students of Canning College are permitted to use the Canning College Dispensary on payment of a fee of Re. 1 per annum.



1. The Canning College Athletic Association shall have 7 Clubs, each running the games as detailed below:—

- (i) Tennis—Tennis.
- (ii) Hockey—Hockey.
- (iii) Football—Football.
- (iv) Cricket—Cricket.
- (v) Badminton—Badminton.
- (vi) Rowing—Rowing and Swimming.
- (vii) Athletics—Athletics, Volley Ball, Basket-Ball, Wrestling, Kabaddi, Boxing and Gymnastics.

2. Each Club shall be in charge of a President.

3. The Wardens shall furnish to the Canning College Athletic Association at the beginning of the session a complete list of students including the preferences of the approved games that their residents desire to play.

4. The minimum number of days for attendance per session shall be sixty days. The General Secretary shall fix and announce at the beginning of each term the number of days for attendance required for that term.

5. In case a student is not able to make up his sixty attendances in the game of his first preference he will be required to make up his shortage by attendance in some other approved game.

6. The student will be provided with a card on which the attendance at games will be recorded and signed by Captains (or in their absence by persons approved by the Wardens) of particular games. The attendance card will be deposited by each student in a box in his Hostel on a fixed day every week.



7. Students playing in the Hostel shall get their attendance recorded through the Hostel Captains.

A consolidated Attendance Register shall be maintained in the office and attendance will be recorded therein once a week. The Attendance Register will be checked weekly by the Director of Physical Instruction.

8. Exemption may be granted only on medical grounds by the Warden on the recommendation of the Medical Officer of the Canning College.

9. A fine of Re. 1 shall be imposed by the Warden on a student for each day if he falls short of the minimum attendance required.

The Director of Physical Instruction shall furnish to the Warden at the end of each term a list of delinquents.

10. The members of the N. C. C. will be exempted from the Compulsory games' attendance provided their attendance at parade is certified by the Officer Commanding, N. C. C., which he will do at the end of each term.

### **Duties of the Director of Physical Instruction.**

1. The Director of Physical Instruction shall be under the General Secretary, Canning College Athletic Association, in relation to the Canning College activities. For the King George's Medical College activities he will be under the President, King George's Medical College Athletic Association.

2. The Director of Physical Instruction shall be required to give at least 6 hours work per day distributed as follows:—



(i) One hour each day in the morning at the Maharaj Singh Gymnasium, for four days in the week, and one hour in the morning for each of the following groups of hostels and lodges :—

- (a) Mahmudabad and Habibullah Hostels.
- (b) New Hostel and Butler Hostel.
- (c) Tilak Hostel and Ismail Lodge.
- (d) Subhas Hostel and Vice-Chancellor's Lodge.

(ii) The afternoon working hours will be from 2 to 6 P. M. in winter and from 3-30 to 7-30 P. M. in summer.

The variations of hours may be arranged in consultation with the General Secretary, Canning College Athletic Association.

(iii) He shall devote altogether 10 hours per week for the King George's Medical College. The time will be settled in consultation with the President, King George's Medical College Athletic Association, and the General Secretary, Canning College Athletic Association.

3. His services shall be available to each constituent Club of Canning College Athletic Association.

### C.—Games\*

#### Canning College Athletic Association.

1. *Name*—All games and sports of the Canning College shall be under the control of an association to be called the Canning College Athletic Association.
- Regulations.

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\*Certificates are given (i) to members of any team which represent the University or a College in football, hockey, cricket or tennis, and (ii) for proficiency in boxing, gymnastics, and athletics.



All students of the Canning College, *i. e.*, students belonging to the Faculties of Arts, Science, Commerce and Law shall be members of the Association except women students.

Persons who are not regular students of any Faculty in the University shall not become members of the Association.

Games fee paid by women students of Canning College shall be placed at the disposal of the Warden, Kailash Hostel.

2. *Managing Committee.*—The Managing Committee of the Canning College Athletic Association shall consist of the following members:—

- (a) The Chairman, to be appointed annually by the Executive Council.
- (b) The Proctor.
- (c) The Superintendent of Gardens and Grounds, Canning College Area.
- (d) The Treasurer, Canning College Athletic Association.
- (e) The General Secretary, Canning College Athletic Association.
- (f) The Presidents of the following Clubs—
  - (1) Tennis.
  - (2) Hockey.
  - (3) Cricket.
  - (4) Football.



(5) Swimming and Rowing.

(6) Athletics\*

(g) The Director of Physical Instruction.

(h) The College Captains for Tennis, Hockey, Cricket, Football, Rowing, Swimming, Athletics and Gymnastics.

3. *Functions.*—The functions of the Managing Committee shall be:

(a) to decide matters of policy;

(b) to sanction the budget and allot funds;

(NOTE.—Grants at present made to hostels will be continued.)

(c) to supervise the working of the Clubs and to pass the annual accounts.

4. *Appointments.*—The Presidents of the various Clubs and the Treasurer and General Secretary of the Canning College Athletic Association shall be appointed by the Vice-Chancellor from amongst the members of the Teaching Staff.

5. *Duties of a President.*—Each President shall be in charge of his Club, *i. e.*, he is responsible for internal administration, preparation of the Club budget and disposal of money placed in his charge by the Association, ordering of materials and other requirements, maintenance of a stock-book, the disposal of unserviceable articles, etc.

6. *Duties of the Treasurer.*—The Treasurer shall be empowered to withdraw necessary amounts from the sum collected and kept in custody by the University on behalf of the Association.

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\*Volley-ball, Basket-ball, Wrestling, Boxing, Kabaddi, Calisthenics, Gymnastics, and Track and Field events.



The Treasurer shall maintain accounts, check and pay all bills authorised by the President, prepare an annual balance-sheet and present it to the Association.

Any objection made by the Treasurer to a bill presented for payment shall be laid before the Managing Committee.

7. *Audit.*—The previous year's account shall be audited annually by a person appointed by the Vice-Chancellor, not later than the end of September following.

The auditor's report shall be laid before the Managing Committee and transmitted to the Vice-Chancellor.

8. *Duties of the General Secretary.*—It shall be the duty of the General Secretary to keep minutes of the proceedings of the Association, to represent the Association on the Residence, Health and Discipline Board and other bodies, and to control the servants of the Association.

9. *Discipline.*—Questions of discipline within the Club shall be dealt with by the President. Serious cases of indiscipline shall be referred to the Proctor for action.

The Canning College Athletic Association shall have the first claim on the services of any member of the Association.

10. *Grounds.*—Grounds will be allocated by the General Secretary, Canning College Athletic Association, in accordance with the general policy laid down by the Association.

11. *Club Committees.*—The President of each Club shall be assisted by a Committee consisting of:—

(a) The President (*Chairman*).

(b) The Director of Physical Instruction.



- (c) The College Captain.
- (d) The Hostel Captains.
- (e) The Captain for non-resident students.

12. *College Captains.*—Each College Captain shall be appointed by a Committee consisting of:—

- (a) The Chairman, Canning College Athletic Association.
- (b) The President of the Club concerned.
- (c) The Proctor.
- (d) The retiring Captain.

13. The College Captains for next session shall be appointed in July.

14. The Captain shall organise games and be responsible for the behaviour and discipline of the team on the field. He shall also be responsible for the material in his charge.

A College team shall primarily be selected by the College Captain, but the final decision regarding the composition of the team shall rest with the President.

15. *Other Captains.*—Hostel residents and non-resident students shall elect their Captains for each Club. The Warden of each Hostel shall convene the necessary meeting within the first fortnight of the session. The meeting of non-resident students shall be convened by the General Secretary, Canning College Athletic Association.

16. The teams of the hostels and of the non-resident students shall be selected by their respective Captains.



17. Hostel teams shall be controlled by the Wardens, and team of non-resident students by the Chairman, Canning College Athletic Association, through their respective Captains.

18. *Subscriptions.*—All fees, subscriptions, fines, etc. due to the Canning College Athletic Association shall be collected by the Honorary Treasurer, Lucknow University.

19. All regular students of the University belonging to the Faculties of Arts, Science, Law and Commerce shall pay in advance a consolidated fee of Rs. 6 for games.

20. Students who play tennis and badminton or take part in gymnastics, rowing and swimming or in any other game shall pay an additional fee as approved by the Canning College Athletic Association and notified by the President of the game concerned in the beginning of the session.

21. *Meetings.*—The Managing Committee of the Association shall meet ordinarily once a term. Three clear day's notice shall be given of an ordinary meeting of the Managing Committee.

Extraordinary meetings may be called by the Chairman on his own initiative, or on the written requisition of at least five members of the Managing Committee. Such requisition must be submitted to the General Secretary at least three days before the day on which it is desired that the meeting be held, and must specify the business to be considered.

Five members of the Managing Committee shall form a quorum.

Questions shall be decided by a majority of votes. In the event of the votes for and against being equal the Chairman of the meeting shall have a second or casting vote.



## King George's Medical College Athletic Association.

1. All games and sports of the King George's Medical College shall be under the control of an association to be called the King George's Medical College Athletic Association.

2. The Committee of the King George's Medical College Athletic Association shall consist of—

- (i) The President, King George's Medical College Athletic Association.
- (ii) The Secretary, King George's Medical College Athletic Association.
- (iii) Captains of the various games.
- (iv) The Director of Physical Instruction.

3. The President, who shall be nominated by the Principal, from amongst the members of the staff, shall also be *ex-officio* Treasurer of the King George's Medical College Athletic Association.

### Teams.

Each University team shall be chosen by a Selection Committee consisting of the Presidents of the two College Athletic Associations and the College Captains of the games concerned.

### Discipline.

1. The Captain of each team is responsible for the discipline of his team.

2. The list of players, including reserves will be drawn up by the Team Selection Committee. Players will be notified and signatures obtained as early as possible before the match. Failure to play when duly notified is a breach of discipline.



3. No Canning College student shall play for any club or team other than that of the College during the session. He may, however, on previously obtaining the written permission of the President concerned, play during summer vacation only for other teams.

4. If a student breaks Rule No. 3, disciplinary action may be taken against him, which may be a fine or suspension of both.

5. If a University student plays in a match for a team against the University, he will be deemed unworthy of the University and may be expelled forthwith.

6. A University player may play for the Lucknow District or the State with the permission of the President concerned.

7. Any breach of discipline shall be reported by the Captain to the President of the Athletic Association concerned, who may take such measures as he thinks fit, or report the breach to the Proctor. The Proctor may impose a fine up to Rs. 10, and on a repetition of the offence may debar the player concerned from all games connected with the University.

### Colours.

1. *Blazer*: Alternate vertical stripes of chocolate (approximate 3" wide) and old gold (approximate 1" wide); the pocket to carry the letters L. U. with C.C., F.C., H.C., T.C., R.C. or A.C., according as the colours are given for cricket, football, hockey, tennis, rowing, or athletics; letters to be in green.

2. *Shirts*: The body in chocolate; the collar, sleeves and pocket in old gold; letters in green.



3. *Pull-over*: V—shaped neck with sleeves ground colour cream; coloured bands at collar, sleeves and waist one stripe each chocolate and gold; green lettering on left breast.

4. *Tie*: Similar to the Canning College tie in pattern; the ground chocolate, with narrow stripes of gold separated by alternate broad and narrow stripes in chocolate.

5. *Cap*: Same colours; lettering on peak.

6. *Scarf and Hose*: To match.

7. In the case of every University player awarded University colours when playing for the University, half the cost of the shirt to be provided by the Athletic Association to which he belongs, as is the present practice with respect to College colours; but that the purchase of blazer, cap, etc., be optional and at the player's own expense.

### Attendance.

Credit for attendance will be given for days on which students are absent from Lucknow in order to play matches on behalf of the University, subject in each case to the specific approval of the Vice-Chancellor.

### General.

*Students—Grade A*, are those who are regularly enrolled and are undergoing a course of instruction for a Degree or a Diploma for which, according to the Regulations of the University, the Intermediate Examination is a minimum qualification.

*Students—Grade B*, are all others, including casual students, for whom regular enrolment is not insisted



upon and who are undergoing a course of instruction for a Diploma or a Certificate for which the minimum qualification of the Intermediate Examination is not necessary.

Only Grade A students can become members of the Athletic Association and the University Union, etc., on payment of the necessary fees.

In exceptional cases Grade B students may be allowed as supernumerary members, to avail themselves of the facilities provided by the Athletic Association, the Union, etc., on payment of the necessary fees, but they will not be eligible to hold any office or to be member of any representative team except with the special permission of the Canning College Athletic Association.

#### **D.—Discipline.**

The following are rules regarding Discipline.

1. *Powers of the Vice-Chancellor.*—Under the Lucknow University Act, 1920, Section II, the Vice-Chancellor is responsible for the discipline of the University.

*Section 11 (2)*—It shall be the duty of the Vice-Chancellor to see that this Act, the Statutes, and the Ordinances are faithfully observed, and he shall have all powers necessary for this purpose.

*Section 11 (5)* .....He shall be responsible for the discipline of the University in accordance with the Act, the Statutes and the Ordinances.

2. *Disciplinary offences.*—The following powers to deal with disciplinary offences are delegated by the Vice-



Chancellor to the officers and members of the staff concerned to be exercised by them under his control:—

- (a) An offence against discipline in a class room or verandah may be dealt with by any member of the teaching staff whose work is interfered with or who is otherwise affected by the offence.

Any such member of the teaching staff may impose a fine upto Re. 1 for a first offence, or upto Rs. 5 for a repeated offence. Each such case shall be reported to the Dean of the Faculty to which the offending student belongs for necessary action.

The Dean is responsible for discipline of students belonging to his Faculty, and shall take action in all offences against discipline in classes, buildings, and areas adjacent thereto under his control.

- (b) Breaches of discipline during examinations shall be dealt with as provided by the rules.
- (c) Breaches of discipline in the University Library and adjacent area shall be dealt with by the Librarian.
- (d) Breaches of discipline in a hostel shall be dealt with by the Warden under the hostel rules.
- (e) Breaches of discipline in teams or on the playing fields or tennis courts, or during games or athletic activities whether compulsory or not shall be dealt with by the President of the activity concerned.
- (f) Breaches of discipline in Delegacy Centres shall be dealt with by the Superintendent concerned.



(g) Disciplinary offences not covered by the foregoing shall be dealt with by the Proctor.

(h) Action taken under the foregoing rules shall be reported to the Proctor, Lucknow University, for record.

3. (a) Superintendents of Delegacy Centres, Presidents of games, the Librarian and the Superintendents of examinations may impose a fine not exceeding Rs. 10 and the Wardens may impose a fine upto the extent of Rs. 50 or expel from the hostel or both.

(b) The Proctor shall have the power to impose fine upto the limit of Rs. 50. He shall have power to suspend any student of the University when a case is referred by him to the Vice-Chancellor. The Deans shall have the same powers regarding fine and suspension.

The Additional Proctors shall have the same jurisdiction as the Proctor and they shall have power to impose a fine upto Rs. 30, but for more serious offence they should report to the Proctor for necessary action. They will work under the direction of the Proctor.

(c) In the case of an offence of grave character the same officers may submit the case to the Vice-Chancellor for necessary action.

4. Nothing in these rules shall affect the power of officers-in-charge of University or Government property to take immediate steps for the recovery of the cost of loss of, or damage to, such property.

### **Dress.**

The following dress is prescribed for students of the King George's Medical College, Lucknow, during College hours:—



(a) *Male students*.—Closed collar coats with grey pants or trousers of washable material and shoes. In the dissection hall, laboratories, wards and operation theatres, students shall as well put on aprons.

(b) *Female students*.—White sarees with simple and sober coloured borders and white coat aprons of white washable material with shoes of flat heels (not high heeled).

During winter season both male and female students may put on woollen pullover inside.

### E.—Terminal Reports.

1. The Dean shall send a terminal report to the parent or guardian of each student belonging to the Faculties of Arts, Science and Commerce. In the case of students of the Faculty of Medicine a similar report shall be sent once a year.  
Regulations.
  2. The report shall include:—
    - (i) The results of the terminal examination.
    - (ii) The percentage of his attendance at lectures.
    - (iii) The percentage of his residence in the Hostel.
    - (iv) The report of his medical examination.
    - (v) The report of his general conduct in the Hostel
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## CHAPTER III.

## FEES.\*

Ordinances. 1. Fees payable to the University are classified under the following heads:—

- (a) Enrolment Fee.
- (b) Tuition Fee.
- (c) Deposit Fee.
- (d) Delegacy Fee.
- (e) Admission Fee.
- (f) Hostel Fee.
- (g) Games and Union Fees.
- (h) Library Fee.
- (i) Examination Fee.

2. The Fee for enrolment shall be Rs. 12.

†3. The Tuition fees for the various Faculties shall be:—

Rs.

*Faculty of Arts*—B.A. Pass.  
and Honours  
M.A.

144 per session.  
180 , ,

\*Foot-notes—1. When migration of students from one Faculty to another within the University is agreed to by the Deans concerned credit should be given for fees paid in connection with any one Faculty (*vide* Resolution No. 27 of Executive Council dated October 12, 1925).

2. The excess of fees paid by a student of one Faculty with higher tutorial fees should be refunded when he is permitted to migrate to another Faculty with less tutorial fees (*vide* Resolution No. 19 of Executive Council, dated October 11, 1928).

3. The Vice-Chancellor is authorised to decide all questions of students' tutorial fees after consulting the Dean concerned and to decide all questions of hostel fees after consulting the Principal concerned and the Wardens in the case of the Canning College (*vide* Resolutions Nos. 9 and 14 of Executive Council, dated April 11, 1930 and April 25, 1941, respectively).

†Students eligible to re-appear in one subject only will be charged two-thirds of the Tuition fees.



Licentiate of Teaching (L. T.)	Rs. 162 per session
Master in Education	„ 180 „ „
*Research students	„ 180 „ „
†Proficiency in French, or German or Russian Class ....	„ 48 „ „
†Diploma in French, or German or Russian ....	60 per session for students already on the rolls of the University.
	120 per session for students not reading in the University.
†Diploma in Military Science Class ....	18 per session
Diploma in Psychology ....	72 „ „
Diploma in Public Administration ....	96 „ „
Diploma in Foreign Affairs and Diplomacy ....	216 „ „
<i>Faculty of Science</i> —B.Sc. Pass and Honours (except in Geology, for which the fee shall be Rs. 255) ....	180 „ „
M.Sc. (Except in Mathematics and Geology, for which the fee shall be Rs. 180 and Rs. 291 respectively) ....	216 „ „
D.Sc. ....	270 „ „
*For Research students in case of subjects which involve work in the Laboratories ....	270 „ „
*For Research students in case of subjects which do not involve work in the Laboratories ....	180 „ „

\*The Vice-Chancellor may exempt any Post-graduate Research student from payment of Tuition fees.

†The fees should be paid before admission into the class.



	Rs.
<i>Faculty of Commerce.</i> – B.Com.	144 per session
M. Com.	180 „ „
*Ph. D.	180 „ „
<i>Faculty of Law.</i> —LL.B.	180 „ „
LL.M.	180 „ „
*Research students	210 „ „
† <i>Faculty of Medicine.</i> —M.B.B S.	200 per year
B.D.S. ....	300 per session
<i>Faculty of Medicine (Ancient and Modern).</i> —B.M.B S.	200 per year

\*The Vice-Chancellor may exempt any Post-graduate Research student from payment of Tuition fees.

†1. Candidates who have completed the course of study, undergone the course of instruction and complied with the other requirements prescribed under Ordinances and Regulations, but are unable to appear for the examination immediately subsequent to completion of their course of instruction, shall be required to be on the rolls of the University and to pay fees during the period between that examination and the examination at which they finally appear, except in such special cases as may be exempted by the Dean, Faculty of Medicine.

2. In the case of a student who appears for the Final M.B.B.S. Part II in the whole examination or in one subject only in October :

Rs. 10) *plus* one instalment of Hostel fee and Games fee Rs. 7 from male students and Rs. 6 from female students.

Provided that if he fails to pass in the October examination, the fee will be :

Rs. 100 extra *plus* the remaining two instalments of Hostel fee.

3. If a student who has failed in the Final M.B.B.S. examination, wishes to attend again any of the practical classes noted below, he will be required to pay the following extra fees :—

	Rs.
(1) Diagnostic and Laboratory methods, re-attendance ....	10
(2) Operative Surgery class ....	15
(3) Special practical course in Pathology ....	15



**D.P.H.\***

The fee for separate subjects is as follows:—

	Rs.
Chemistry and Physics, Bacteriology and Parasitology including Entomology ....	100
Theory of Hygiene ....	100
Sanitary Engineering ....	60
Practical Public Health Administration and Out-door Work under a Medical Officer of Health	50
Attendance at an Infectious Diseases Hospital ....	30
<b>Total</b> ....	<b>340</b>

4. The fees payable by casual students are:—

(1) Entrance fee	....	3
(2) Annual fee	....	75
(3) Fee for each course of Dissection	....	8
(4) Fee for each course of Practical Histology Normal	....	15
(5) Fee for each course of Physiology	....	10
(6) Fee for each course of Physiological Chemistry	....	10
(7) Practical Morbid Histology and Bacteriology including Diagnostic and Laboratory Methods	....	22
(8) Diagnostic and Laboratory Methods, re-attendance	....	15
(9) Fee for each course of Pharmacy	....	10
(10) Hospital fee for each year	....	25
(11) Fee for course of Operative Surgery	..	15

5. Fee for Post-graduate students:

*For dissection.*

(1) Complete body (one side)	....	65
(2) Limbs, upper and lower (for each)	....	10
(3) Thorax	....	10
(4) Abdomen	....	15
(5) Head and neck	....	20
(6) Brain	....	10

NOTE.—(The fees would be payable to the University.)

\*NOTE.—1. Fees for Public Health Administration and Out-door work should be paid direct to the Medical Officer of Health under whom the course is taken.

2. The fee for supplementary courses for unsuccessful candidates will be half the above in each case.



*Diplomas in—*

(1) Medical Radiology and Electricity.	} Rs 400 per session from students outside U. P.	} Payable in three instalments.
(2) Laryngology and Otology.		
(3) Gynæcology and Obstetrics.	} Rs. 300 per session for U. P. students	

\*4. Fees shall be paid in six instalments in advance.

†5. The six instalments of fees become due on the opening day of the session, September 10th, October 20th, December 1st, January 10th and February 20th, respectively, and shall be paid on such dates as may be fixed by the Honorary Treasurer, except in the case of the Faculty of Medicine where fees for the whole year shall be paid, provided that the Dean, Faculty of Medicine, may, in specially deserving cases, permit payment of fees in four instalments.

The fees from the students of the Faculty of Medicine (Ancient and Modern) shall be collected in one instalment in the beginning of the session, provided that the Dean, Faculty of Medicine (Ancient and Modern), may, in deserving cases, permit payment of fees in two instalments. The second instalment of fees will be collected together with the fourth instalment of fees of the Science Faculty.

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\*Payment of dues (except Examination fees) in case of scholarship-holders, whose scholarships are not less than the Tuition fees, may be deferred until the scholarships are paid.

†When a student, who is a member of two Faculties, becomes defaulter in respect of payment of fees of one of them his name shall be struck off the roll of that Faculty. On re-admission to that Faculty he shall be required to pay a fee of Rs. 4.



After that a fine of four annas a day, unless remitted by the Dean, shall be imposed until the fees are paid. The Dean may, in special cases, extend time for payment of fees until the last date of the instalment. If a student's fees and fines remain unpaid in the case of the Faculty of Medicine till the 27th August and any other Faculty till the last date specified for receiving each instalment of fees, his name shall be struck off the roll. He can only be re-admitted on payment of a new Admission fee in addition to arrears of fees and fines. The last date\* for receiving fees in the case of the Faculties of Arts, Science, Commerce and Law shall be as shown below:—

Last date for the first instalment	....	.... Upto August 15th.
Last date for the second instalment	....	.... Upto September 30th.
Last date for the third instalment	....	.... Upto November 10th.
Last date for the fourth instalment	....	.... Upto December 20th.
Last date for the fifth instalment	....	.... Upto January 31st.
Last date for the sixth instalment	....	.... Upto March 15th.

Provided that the Dean of the Faculty concerned may further extend the last date by not more than 7 days on being satisfied that the student is unable to pay on account of some acute difficulty.

All persons who seek admission to a course of study for a particular degree must on admission thereto pay all fees for the full session in the case of the Medical Faculty and the first instalment of fees in the case of other Faculties.

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\*The names of students whose fees remain unpaid on the last grace day fixed for each instalment shall be struck off the roll of the University by the Hony. Treasurer who shall inform the Registrar and the Dean concerned accordingly.



Students joining D.P.H. Part I class shall deposit their fees in the Dean's office on or before the 15th of September. The name of any student not depositing his fee by that date will be struck off the admission roll. Fees once deposited will not be refunded.

Students joining D.P.H. Part II class shall deposit their fees on or before the 10th of July, after which date a fine of annas four per day shall be imposed for every day that the fees remain unpaid up to the 27th July, when their names shall be struck off the roll. They will be eligible for re-admission next year on payment of a new Admission fee in addition to arrears of fees and fines.

6. Students on enrolment shall pay a Deposit fee\* according to the following scale:—

			Rs.
Faculty of Arts	....	....	10
Faculty of Science (except in Mathematics for which the Deposit fee will be Rs. 10)	....	....	25**
Faculty of Medicine	....	....	50
Faculty of Medicine (Ancient and Modern)	....	....	50
Faculty of Law	....	....	10
Faculty of Commerce	....	....	10

In addition to the above deposit a special Library deposit of Rs. 10 shall also be charged from student who wish to borrow books from the University Library. Students who use the Library books on the premises will not be required to pay this special deposit.

\*For refund of Deposit fee Regulation 5 of this Chapter should be consulted.

\*\*B.Sc. and M.Sc students may be required to make up the full deposit of Rs. 25 at any time when breakages justify this.



7. An Admission fee of Rs. 4 shall be charged on first admission to a Faculty or re-admission thereof, if there is a break in continuity.

An additional Admission fee of Rs. 4 shall be charged from students on their first joining the Law Faculty.

\*8. The following fees, to be paid in six equal instalments together with the Tuition fees, shall be charged for Hostel accommodation:—

Rs. 90 per session for a single room.

Rs. 135 „ „ „ a double room.

In the event of a vacancy, a student admitted to a hostel during the currency of a session shall be charged rent at the rate of Rs. 10 or Rs. 15 as the case may be, for each month or part of a month. Students leaving a hostel during the currency of a session shall not be entitled to a refund of rent.

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\* (i) Third and Fourth year students of the Medical Faculty will pay Rs. 20 extra for the period of two months of the vacation when they have to do duties in the Hospital.

If they do not vacate their rooms during the whole vacation they will pay Rs 30 for the total period of 3 months vacation.

(ii) A deposit of Rs. 10 shall be charged from all resident students who come to reside in the hostels during the third term.

(iii) Rs. 67/8 per session per occupant to be charged where more than one student has been accommodated in a single-seated room or more than two students in a double-seated room.

(iv) An extra fee of Rs. 5 per mensem will be charged from students residing in Chakravarti, Gokaran Nath Misra and Vijay Lakshmi Hostels for the use of Electric Appliances (*vide* Executive Council Resolution No. 18 dated February 24th, 1948, and Resolution No. 30 dated July 16, 1948.)



The following consolidated fees shall be charged in six equal instalments together with the Tuition fees from the women students residing in the Women Students' Hostel:—

Rs. 90 per session for a single room.

Rs. 67/8 per session per occupant for a large room when occupied by more than one person—otherwise Rs. 90.

Every resident student of the University shall pay a Hostel Deposit of Rs. 10.

Male students\* exempted from residence in hostels shall pay a Delegacy fee of Rs. 8 in six instalment along with the University Tuition fee, as follows:—

First instalment .... Rs. 2

Second instalment .... „ 2

Third, fourth, fifth and sixth instalment Re. 1 each instalment.

9. (a) All regular† students of the University except the non-resident students taking the Diploma Course in Psychology alone and the non-resident students of the LL.M. shall pay a consolidated fee in advance for Games according to the following scale:—

Students of the Canning College:—

Rs. 6 if a student joins during the first term.

Rs. 4 during the second, or Rs. 2 during the third term.

\* (i) Those who are in receipt of full freeships will pay only half the Delegacy fee, i. e., Rs. 4 instead of Rs. 8.

(ii) Those who are in receipt of half-freeships will pay only three-quarters of the Delegacy fee, i. e., Rs. 6 instead of Rs. 8.

These exemptions will not apply to students of Ph.D. and D.Sc. classes who are exempted from payment of Tuition fees.

†“Regular students” are students engaged in a course of study for a Degree or Diploma, except Diploma courses in Arabic, Persian and Sanskrit.



### Faculty of Medicine :—

Rs. 7 (male students).

Rs. 6 (female students).

### Faculty of Medicine (Ancient and Modern) :—

Rs. 7 (male students).

Rs. 6 (female students).

(b) Of the Games fees paid by resident students one-fourth shall be set aside as a subsidy for the athletic games of their respective hostels.

(c) All women students of the University who are not residing in the Isabella Thoburn College, shall pay a consolidated fee of Rs. 6 per year for games.

The Games fees realised from women students shall be made over to the Warden of the Women Students' Hostel for organisation of games.

10. Every student of the University, except students of the Medical Faculty, shall pay a Library fee of Rs. 3 per session.

A Library fee of Rs. 5 per session shall be charged from students of the Medical Faculty and Faculty of Medicine (Ancient and Modern).

11. The fees for the various Examinations shall be according to the following scale :—

Arts and Science—	Rs.
(a)—B.A. and B.Sc. Preliminary	.... 20
B.A. and B.Sc. Pass*.	.... 30
B.A. and B.Sc. Hons*.	.... 55

A fee of Rs. 10 to be charged from a candidate who has to appear in General or Special English only or in one subject only under Ordinance 2 (iii) under Master of Arts (for Pass Graduates). A fee of Rs. 2 to be charged from a candidate who has to appear in General English at the end of his first year in the B.A. or B.Sc. courses.

Full Examination fee to be charged from students who appear in one subject only under the Compartmental system.



Provided that a student who holds a Pass degree and wishes to take an Honours degree or a student who has passed the examination of one Honours School and wishes to appear in the examination of another Honours School shall pay an Examination fee of Rs. 20.

			Rs.
M.A. and M. Sc.	....	....	50
*Master in Education	....	....	50
M.A. and M.Sc. Part I Previous	....	....	30
M.A. and M.Sc. Part II Final	....	....	30
Diploma in Psychology	....	....	20
Diploma in Public Administration	....	....	30
†Diploma in Foreign Affairs and Diplomacy,			30
Diploma in Social Services	....	....	50
Diploma in French	....	....	30
Diploma in German	....	....	30
Diploma in Russian	....	....	30
Ph.D.	....	....	200
D.Sc.	....	....	200
D.Litt.	....	....	200

(b) *Re-examination:*

B.A. and B.Sc. (Honours)			
Honours subject	....	....	20
Each subsidiary subject	....	....	10
Each subsidiary subject (after passing the examination in the principal subject)	....	....	15

(c) The students of B.Sc. Preliminary and Pass shall pay a Terminal Examination fee of Re. 1 per session along with the first instalment of Tuition fees.

\*A.B.Ed Sc. student of the Lucknow University appearing in two Papers of M.Ed, or a Thesis, will pay an Examination fee of Rs. 30.

†Students appearing at the Test of French, or German or Russian

.... .... Rs. 10.



**Medicine—**

Rs.

Pre-Medical Test	....	....	30
First M.B.B.S.	....	....	25
Final M.B.B.S. (Part I)	....	....	55
Final M.B.B.S. (Part II)	....	....	50
Re-examination in Final M.B.B.S. Part I....			50
Re-examination in one subject of Final M.B.B.S.	....	....	30
1st Year B.D.S.	....	...	25
2nd Year B.D.S.	....	....	50
3rd Year B.D.S.	....	....	50
4th Year B.D.S.	....	....	50

Re-examination fee for each class will also  
be the same.

M.D.	....	....	200
M.S.	....	....	200
D.P.H.	....	....	100

for each Part

Diploma in Medical Radiology and Electricity	....	....	100
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for each Part

Diploma in Laryngology and Otology	....	....	100
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for each Part

Diploma in Gynæcology and Obstetrics	....	....	100
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for Part I

and Rs. 200

for Part II.

**Medicine (Ancient and Modern)—B.M.B.S.**

Preliminary Examination	....	....	10
First B.M.B.S.	....	....	25
Final B.M.B.S. (Part I)	....	....	55



	Rs.
Final B.M.B.S. (Part II) ....	50
Re-examination in Final B.M.B.S. (Part I) .....	50
Re-examination in one subject of Final B.M.B.S. ....	30
<b>Law—</b>	
LL.B. Previous .....	30
LL.B. Final .....	40
LL.M. Part I .....	50
LL.M. Part II .....	50
LL.D. ....	200
<b>Commerce :—</b>	
B.Com. Previous ....	20
B.Com. Final* ....	30
M.Com. Part I ....	30
M.Com. Part II ....	30
Ph.D. ....	200
Special Paper in Accountancy ....	10
<b>Diploma Examinations—</b>	
(1) <i>In Arabic and Persian:—</i>	
Maulvi and Dabir ....	4
Alim and Dabir-i-Mahir ....	8
Fazil and Dabir-i-Kamil ....	10
(2) <i>Licentiate of Teaching:—</i>	
For the full examination ....	30
For each subject at a subsequent examination ....	10

\*Full Examination fee to be charged from students who appear in one Section only under the Compartmental system. A fee of Rs. 10 to be charged from a candidate who has to appear in General or Special English only.



(3) <i>Sanskrit</i> :—				Rs.
Shastri	....	....	....	8
Acharya	....	....	....	10

(NOTE-—Before appearing in Part I of the Acharya examination, a candidate must deposit the fee for the whole examination\*, *i.e.* Rs. 10.)

Certificate of Proficiency in French, or  
German or Russian .... Rs. 10

12. Candidates before admission to any examination shall pay the fee prescribed for that examination on each occasion of their admission to it.

13. A candidate who fails to pass, or who from sickness or other cause† is unable to present himself for any examination, shall not receive a refund of fee: provided that the Executive Council may, for sufficient cause, permit the candidate to present himself for the next ensuing examination, without payment of a further fee. In such a case the application‡ must be submitted within one month of the date of commencement of examination.

¶1. In the case of two brothers or sisters or a brother and a sister studying in the Faculties of Arts, Science or Commerce in the Canning College, the younger one shall be excused from the payment of half his (or her) Tuition fee.

\*A fee of Rs. 5 will be charged from a candidate who has to re-appear in either Part of the Acharya examination.

†Does not refer to students who are not permitted to sit for any examination owing to shortage of attendance.

‡The Vice-Chancellor is authorised to dispose of such applications (*vide* Resolution No. 19 of Executive Council dated April 11, 1930).

¶More than one brother and sister of a student who wish to prosecute their studies can get the concession of half Tuition fees.



251 No concession shall be allowed if even one of the two is studying in the Faculties of Law or Medicine or is the holder of a University Fellowship.

2. A fee of Rs. 5 shall be charged for the issue of a duplicate diploma for any degree provided the applicant submits an affidavit certifying the loss of the original, signed in the presence of a Magistrate or the Principal of the College in which the candidate studied.

3. A fee of Rs. 5 shall be charged for each (1) certificate of age, (2) migration or transfer certificate, (3) provisional certificate issued by the University, except in respect of Diploma examinations in Arabic, Persian, or Sanskrit. A fee of Rs. 5 shall be charged for other certificates (except character certificates) requiring reference to University records. Such certificates, if issued by the Deans of Faculties, shall be countersigned by the Registrar.

750 4. Such candidates as are unable to present themselves in person at the Convocation will be given their diplomas by the Registrar on payment of a fee of Rs. 5. A single fee of Rs. 5 will be charged even if more than one diploma is due at the same time.

5. If a student after leaving the University does not claim his Deposit fee within a period of 12 months, he shall forfeit his Deposit fee.

6. Applications made by students for refund of fee or deposits other than the fee mentioned in Regulation 5 above must be submitted within twelve months from the date of payment of such fee or deposits, otherwise the money will be forfeited to the University.

7. The Enrolment and Admission fee will not be refunded if the applicant declines to join after the Admission Card is issued.



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*Bicycle Rack Fee.*

8. Students of the Faculties of Arts, Commerce and Law, who bring bicycles to any building where teaching is conducted, will be required to register their names on or before the 30th September on payment of an annual fee of Re. 1 and will be entitled to use the bicycle racks provided by the University. Penalty for failing to register will be one anna per day subject to a maximum of Re. 1 in addition to the Registration fee of Re. 1.

*Rules for Refund of Fees.*

1. In the case of under-graduate students the Enrolment and Admission fees will *NOT* be refunded, unless the University has refused admission.

2. In the case of post-graduate students neither the Enrolment and Admission fees nor the deposit of Rs. 16 will be refunded unless admission is refused by the University.

3. In the case of old students who are not required to pay the Enrolment and Admission fees afresh, the deposit of Rs. 16 will not be refunded unless admission is refused by the University.

4. When a student migrates from one Faculty to another with the permission of both Deans concerned, the fees paid for one Faculty will be transferred to the other Faculty. If the fees paid in the first Faculty are in excess of the fees required for the second Faculty, the balance will be refunded. If the fees paid are short of the amount due, the balance will be paid by the student before admission to the second Faculty is granted.

5. When a student is transferred from the Science Faculty to the Medical Faculty as a result of the Pre-



Medical Test, the consent of the Deans concerned will not be required.

6. When a student is transferred with the permission of the Deans concerned from one of the Colleges teaching B.A. or B.Sc. classes to the University or *vice versa* within one month of the re-opening of the University all fees paid to one institution will be transferred to the other institution.

7. If a student has paid the Enrolment and Admission fees and also the fees for one term but has not attended a single class, to be certified by the Dean concerned, the fees paid by him excepting the Enrolment and Admission fees will be refunded.

8. In the case of students of the Medical Faculty, if a student has paid fees for one session but has not attended a single class in any particular term, to be certified by the Dean, Faculty of Medicine, full or proportionate fees, as the case may be, paid by him, excepting the Enrolment and Admission fees, will be refunded.

9. The reservation fee for hostel accommodation will not be refundable unless intimation has been received by the Warden concerned or the Registrar *or admission has been refused*. If a student has joined a hostel he will not be entitled to refund of the Hostel fee.

10. In the case of students of the Medical Faculty the reservation fee for hostel accommodation will not be refundable unless intimation has been received by the Warden concerned. If a student has joined a hostel and leaves it within one month of the commencement of a



University term, by permission of the Warden, proportionate fees, after deducting fees for one month, may be refunded, provided that the accommodation is taken up by some other student and the University is not put to any loss thereby.

11. The deposits for the Library and Science Faculty will be refunded after the Librarian and the Head of the Department concerned have certified that there are no outstanding dues. Certificates from all other officers concerned will be obtained before these deposits are refunded.



## CHAPTER IV

### VACATIONS AND HOLIDAYS

1. The University session comprising of three Ordinances. terms shall be as follows:—

For the Medical Faculty:—

1st term....From 1st August to 31st October, ordinarily.

2nd term....From 1st November ordinarily to 24th December.

3rd term....From 2nd January to 30th April

For other Faculties:—

1st term...From 16th July to beginning of Dasehra recess.

2nd term...From end of Dasehra recess to 24th December.

3rd term....From 9th January to 30th April.

2. The period of Dasehra and Christmas recess shall each be of 14 days for all Faculties but in the Faculty of Medicine the Christmas recess will be from December 25 to December 31.

3. The casual holidays shall be as determined by the Executive Council.



The following is the list of casual holidays:—

(1) New Year's Day	....	.... 1 day.
(2) Republic Day	....	.... 1 „
(3) Chehlum	....	.... 1 „
(4) Bara Wafat	....	.... 1 „
(5) Basant Panchmi	....	.... 1 „
(6) Sheoratri	....	.... 1 „
(7) Holi or Doljatra	....	.... 2 days.
(8) Good Friday	....	.... 1 day.
(9) Ram Naumi	....	.... 1 „
(10) Alvida (last Friday of Ramzan)	....	.... 1 „
(11) Id-ul-Fitr	....	.... 1 „
(12) Independence Day	....	.... 1 „
(13) Raksha Bandhan	....	.... 1 „
(14) Krishna Janam Ashtami	....	.... 1 „
(15) Birthday of Mahatma Gandhi	....	.... 1 „
(16) Pitri Bisarjan Amawas	....	.... 1 „
(17) Dasehra	....	.... 4 days.
(18) Id-ul-Zuha	....	.... 1 day.
(19) Dewali	....	.... 3 days.
(20) Moharram	....	.... 2 „
(21) Christmas	....	.... 1 day.
(22) Mahabir-ji Ka Mela	....	.... 1 day.



## CHAPTER V.

FELLOWSHIPS, SCHOLARSHIPS, FREESHIPS AND  
ENDOWMENTS.

## A—General.

1. All scholarships shall be awarded by the Academic Council on the recommendation of a Committee consisting of the Vice-Chancellor, the Dean of the Faculty concerned and one member nominated by the Academic Council.

All University freeships shall be awarded by a Committee consisting of the Vice-Chancellor, the Dean of the Faculty concerned, one member (not a teacher of the University) nominated annually by the Executive Council and the Vice-President of the British Indian Association.

The awards so made shall be reported to the Academic Council at its next meeting.

2. The University scholarships in the First Year B.A. or B.Sc. (Pass or Honours), will be awarded in order of merit to students who have passed the Intermediate Examination of the Board of High School and Intermediate Education, U. P.

3. The scholarships in the B.Com. Previous Class will be awarded in order of merit in the Intermediate Examination in Commerce of the Board of High School and Intermediate Education, U. P., and the scholarships in the B.Com. Final Class will be awarded in order of merit in the B.Com. Previous Examination of the University.

4. Students reverting from Honours Course to Pass Course or proceeding to the Pass degree shall refund their scholarships.



5. All scholarships will be payable in four instalments, the first for three months in October, the second for three months in December, the third for three months in March and the fourth for three months in April, on the recommendation of the Dean.

6. The Vice-Chancellor may, on the recommendation of the Dean or the Principal of the College concerned reduce or cancel a scholarship owing to unsatisfactory conduct of the scholarship-holder.

7. All applications for scholarships other than open University scholarships and all applications for freeships should reach the Dean of the Faculty concerned by the end of the first two weeks from the beginning of the session, provided that applications for Canning College and King George's Medical College scholarships should be submitted to the Principal of the College\* concerned.

8. Only such students shall be eligible for scholarships as shall have been regularly admitted to the University within the first fortnight of the session.

9. Two different scholarships cannot be held by the same person, provided that an endowed scholarship may be awarded to the holder of another scholarship.

### B.—Women Scholarships.

1. The University scholarships for women students shall be awarded by the Academic Council on the recommendation of a Committee consisting of the Vice-Chancellor, the Deans of the Faculties, the Principal of the College concerned, and a member nominated annually by the Academic Council.

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\* Applications for Canning College scholarships should be submitted to the Dean of the Faculty concerned.



2. The University scholarships granted to women students shall consist of :

Eight scholarships of Rs. 15 per mensem each for twelve months.

3. The allocation of the scholarships to the different years of study shall be left to the discretion of the Scholarships Committee as in 1 *supra*.

4. Applications for these scholarships shall be made to the Dean of the Faculty concerned.

### C.—Fellowships.

Whereas it is desirable to institute Fellowships for the encouragement of advanced study and research work, the following Regulations are made:—

1. Fellowships shall be assigned to the Faculties in the following manner:—

Faculty of Arts	.... 5
Faculty of Science	.... 5
Faculty of Medicine	.... 1
Faculty of Law	.... 1
Faculty of Commerce	.... 1

Provided that the Academic Council shall have power to award an additional Fellowship in any Faculty to a candidate who may be specially recommended for the purpose.



2 \*(a) The value of each Fellowship in the Faculties of Arts, Science, Law and Commerce shall be Rs. 75 per mensem and such Fellowships shall be tenable for 21 months, i. e., from the 1st of August to the 30th April of the succeeding year. The value of the Fellowship in the Faculty of Medicine shall be Rs. 100 per mensem tenable for 12 months from 1st of October.

(b) Rs. 15 of the Fellowship shall be withheld and be payable at the time of submission of the thesis for the Doctorate.

(c) All bills† for payment of the Fellowships submitted shall be countersigned by the Head of the Department testifying to satisfactory attendance and diligence on the part of the holder.

3. Only such candidates shall be eligible for a Fellowship as have passed the examination for the Master's degree either in the Faculties of Arts, Science and Commerce, or the examination for the M. B. B. S. degree in the Faculty of Medicine of the University within two years preceding the date of the application.

\*Lapsed Fellowships may be awarded only to those who have been carrying on research in the University satisfactorily for at least one academic session (*vide* Resolution No. 6 of Academic Council, dated April 13, 1934).

In the award of lapsed Fellowships the condition about the applicant having passed the examination within two years preceding the date of the application, mentioned in Regulation No. 3 is not applicable (*vide* Resolution No. 14 of Academic Council, dated September 8, 1939).

†Fellowships will be payable monthly in the office of the Dean. Bills will be prepared by the Dean and countersigned by the Head of the Department concerned, checked by the Treasurer, for making the necessary deductions, and the amount due drawn from the Treasurer for disbursement.



4. (a) Applications for Fellowships shall be made to the Heads of Departments concerned and their recommendations submitted to a Committee consisting of the Vice-Chancellor, the Dean of the Faculty concerned, and one member nominated annually by the Academic Council. Details of the particular topic on which research is proposed to be carried on should be mentioned in the application. The teacher under whose guidance the research is proposed to be carried on should certify that the applicant is fully competent to carry on such research. In recommending the award of a Fellowship the Committee shall take into consideration the full academic record of the applicant from the Intermediate Examination onwards, provided that the Committee shall give preference to a candidate who has taken the Bachelor's degree of the University in the Faculty of Arts, Science, Law and Commerce, and provided also that the Committee may use its discretion to secure a fair distribution of the award among the various departments of a Faculty.

(b) The award of Fellowships in the Faculty of Law shall be restricted to the candidates holding the Master's degree in Law and preference shall ordinarily be given to candidates having research work to their credit, provided that only such candidates shall be eligible for a Fellowship as have passed the examination for the Master's degree within five years preceding the date of the application for the Fellowships.

5. (a) During the tenure of a Fellowship a Fellow shall be under the direction of the Head of the Department who shall submit a terminal report on each Fellow's work to the Vice-Chancellor through the Dean of the Faculty concerned.

(b) The Vice-Chancellor, in consultation with the Dean of the Faculty, may reduce or cancel a Fellowship owing to irregularity of attendance or unsatisfactory conduct on the part of the Fellow.



6. The holder of a Fellowship shall not take up any regular salaried appointment or engage in private practice. He shall not prepare for any examination in any subject or subjects other than the one for which the Fellowship has been awarded. The holder of a Fellowship in the Faculty of Law shall suspend practice.

7. Any application for appointment made by a Fellow during his tenure of a Fellowship should be made through the Head of his Department, the Dean of the Faculty, and the Vice-Chancellor.

8. The Academic Council may, from time to time, prescribe such other general or special condition for a Fellowship as it thinks fit.

9. Research Fellows and Free Research students in the Department of Zoology, Botany and Chemistry may be required, as a condition of their award, to give not more than six periods per head per week in Botany and Zoology and not more than nine periods per head per week in Chemistry, as Student Demonstrators to assist in the Practical B. Sc. classes. Research Fellows and Free Research students in the Faculty of Arts may be required to give tutorial instruction for not more than six periods per head per week.

### Endowment.

#### Dr. CAMERON RESEARCH FELLOWSHIP.

Whereas Dr. M. B. Cameron, ex-Vice-Chancellor of the Lucknow University, has made an endowment of the face value of Rs. 36,400 for purpose of granting fellowships to students of the Faculties of Arts and Science, the following Regulation is hereby made:—

A Fellowship of Rs. 50 p. m., tenable for 21 months, be awarded to a research scholar of the Faculty of Arts and of the Faculty of Science in alternate years, to be selected by the Fellowships Committee



## D.—University Scholarships, Freeships and Endowments.

### Scholarships.

#### IN THE FACULTIES OF ARTS AND SCIENCE.

\*1. Seven scholarships of Rs. 30 per mensem each for 12 months for award to students studying for the Master's degree in the Faculty of Arts.

Regulations.

\*2. Seven scholarships of Rs. 30 per mensem each for 12 months for award to students studying for the Master's degree in the Faculty of Science.

3. Four scholarships of Rs. 20 per mensem each for award to students taking the B. A. (Pass) or (Honours) course, tenable for two or three years according as they are awarded to Pass or Honours students.

4. Four scholarships of Rs. 20 per mensem each for award to students taking the B. Sc. (Pass) or (Honours) course, tenable for two or three years according as they are awarded to Pass or Honours students.

5. One scholarship of Rs. 20 per mensem for III-Year (B. Sc. Hons.) for 12 months.

6. One scholarship of Rs. 20 per mensem for III-Year (B.A. Hons.) for 12 months.

7. In the award of post-graduate scholarships for the Faculties of Arts and Science the results of the last University examination shall be considered.

8. The allocation of the scholarships, mentioned in Regulations 3 and 4, to different years of study shall be left to the discretion of the Scholarships Committee.

\*These scholarships shall be open both to men and women students.



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**\*IN THE FACULTY OF MEDICINE.**

Eight scholarships at Rs. 16 per mensem each for 1st and 2nd year students only.

Twelve scholarships at Rs. 20 per mensem each for 3rd, 4th and 5th year students only.

**IN THE FACULTY OF COMMERCE.**

Two scholarships of Rs. 16 per mensem each for B. Com. for 12 months.

Two scholarships of Rs. 30 per mensem each for M. Com. for 12 months. In determining the award of these scholarships the Committee shall consider the academic record of the candidates and in particular the result of B. Com. Previous and Final examinations. One of these scholarships shall be available for M. Com. Part I and the other for M. Com Part II.

**IN THE FACULTY OF LAW.**

One scholarship of Rs. 16 per mensem for LL.B. for 12 months.

Two scholarships of Rs. 30 per mensem each for LL. M. for 12 months.

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\*The scholarships in the Faculty of Medicine are awarded (i) for the first year on the basis of Pre-Medical Test results, (ii) for the second year on the basis of the totals (and not percentages) of results of class examinations of first year, and (iii) for the third, fourth and fifth years on the results of the University and class examinations (totals and not percentages) (*vide* Academic Council Resolution No. 12 dated March 22, 1944).



## Regulations for the award of Scholarships to LL.M. Students.

1. In determining the award the Scholarships Committee shall consider the academic record of the candidate and in particular the results of his LL.B. Previous and Final examinations, the reports of his class and tutorial work as a LL. B. student, and such other evidence as might be available of the candidate's interest in legal studies.

2. The candidate who is awarded the scholarship shall be required to devote his whole time to legal studies.

3. Failure on the part of the incumbent to maintain satisfactory academic progress shall entail forfeiture of the scholarships.

4. An amount equivalent to the Examination fee prescribed for the LL.M. examination shall be withheld and be payable after the candidate has appeared at the LL.M. examination of the University.

### Freeships.

Ten per cent of students reading in all Faculties of Arts, Science, Commerce and Law, will be allowed free-ships and 15 per cent of students will be allowed half-freeships.

Faculty of Medicine: Not exceeding 5% of total enrolment.

*General*—Half the number of freeships assigned to each Faculty shall be awarded to Oudh students.

A freeship may be converted into two half-freeship s



\*The Vice-Chancellor may exempt any post-graduate research student from payment of Tuition fees.

### Endowments.

#### RADHA KUMUD MOOKERJI MEMORIAL HALF-FREESHIPS.

Dr. Radha Kumud Mookerji Presentation Volume and Lectureship Committee offered in 1945 an endowment of Rs. 4,000 for the creation of two Radha Kumud Mookerji Memorial Half-freeships to be awarded to one student of Ancient India in M.A. Part I or B.A. Honours and one in M.A. Part II or M.A. Special classes every year.

#### KALAKANKAR RAJ SCHOLARSHIP IN SANSKRIT.

In April, 1928, an endowment of Rs. 4,550 was received from the Raja Saheb of Kalakankar, from which a scholarship of Rs. 15 per mensem, tenable for ten months, is awarded to a student taking up Sanskrit for the B.A. (Hons.) or M.A. degree of the University. The scholarship is known as "Kalakankar Raj Scholarship in Sanskrit."

#### RADHA KUMUD MOOKERJI LECTURESHIP.

Dr. Radha Kumud Mookerji Presentation Volume and Lectureship Committee offered in 1943 an endowment to found a Lectureship at the University called "Radha Kumud Mookerji Lectureship." The Committee expects to collect at least Rs. 30,000 for the endowment. So far Rs. 24,500 have been paid by the Committee to the University.

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\*Attention is invited to Regulation 9 under Fellowships.



The following is the Scheme which has been approved by the University for the administration of the endowment:—

(a) The Selection Committee for appointment of the Lecturer is to be constituted of the following members:—

1. The Vice-Chancellor (*ex-officio*).
2. The Dean, Faculty of Arts (*ex-officio*).
3. The Head of the Department of History (*ex-officio*).
4. The Head of the Department of Sanskrit (*ex-officio*).
5. Dr. Radha Kumud Mookerji (or his nominee).
6. Dr. B. C. Law, M. A., B. L., Ph. D., D. Litt., F.R.A.S.B., of Calcutta.
7. Kr. Sri Prakash Singh.
8. Shri A. N. Sapru, I.C.S.
9. Dr. Vasudeva Sharan Agrawala, M.A., Ph.D.
10. Two representatives of the British Indian Association (to be elected every three years by the Association)—

*Appointed from*.....

(i) .....

(ii) .....

(b) The Committee is to make the selection of the Lecturer ordinarily once in two years at least six months in advance.



- (c) The subject of the Lectures is to be an aspect of Indian History and Civilisation (including studies in Oudh History)
- (d) The Lecturer is to deliver a course of not less than three Lectures at the University on the basis of his special studies.
- (e) The Lectures will be published by the University and will become its property.
- (f) The honorarium for the Lecturer will be fixed by the University on the basis of the available income from the endowment.
- (g) The University Executive Council will have power to fill up vacancies in the membership of the Committee, and to take all such action as may be necessary in furtherance of the purposes of the endowment.

*Lecturers:*

1944-45—The Hon'ble Sir S. Varadachariar, Kt.

1945-46—Rao Bahadur K. V. Rangaswami  
Ayengar Avl., M.A.

1947-48—The Hon'ble Shri Harekrushna Mahtab.

1949-50—Shri J. R. Gharpure, B.A., LL.B.,  
F.R.S.A.

Dr. RADHA KUMUD MOOKERJI SCHOLARSHIPS.

Whereas in June, 1944, a sum of Rs. 8,000 was received from Dr. Radha Kumud Mookerji Presentation Volume and Lectureship Committee, for the endowment of scholarships, the following Regulation is made:—

Two scholarships of Rs. 14 p. m. each tenable for ten months, to be called Dr. Radha Kumud Mookerji scholarships, be awarded



each year to the two best students studying Ancient India either in third year Honours or in M.A. classes, provided that such students are not enjoying any other scholarships.

### RAI BAHADUR G. M. MODI SCHOLARSHIP.

Rai Bahadur G. M. Modi, Managing Director, Modi Industries, Modinagar (Meerut) has donated a sum of Rs. 6,000 for the institution of a scholarship in the Department of Hindi for a period of five years. The scholarship will be awarded by the Academic Council on the recommendation of the Scholarships Committee of the University after considering the recommendation for the award to be made by a Committee consisting of the teachers of the Hindi Department with Dr. Din Dayal Gupta, M.A., LL.B., D.Litt. (Alld.), Professor of Hindi, as its Convener.

1. The value of the scholarship will be Rs. 100 p. m.

2. The scholarship will be tenable for two years. It may be extended, in the case the work of the scholar is found to be satisfactory.

3. Only those candidates who are at least M.A. in Hindi with a First or high Second class are eligible for the scholarship.

4. The recipient will have to give an undertaking that he shall not leave the work entrusted to him before its completion or the expiry of the period of two years without the previous permission of the Committee of the Hindi Teachers of the University.

NOTE:—The recipient will compile a dictionary of 'Surdas' सुर शब्द कोश under the guidance of and in collaboration with Dr. D. D. Gupta, Professor of Hindi.



### **E.—Canning College Scholarships and Endowments. Scholarships.**

Five scholarships at Rs. 14 per mensem are awarded to B.A. or B.Sc. students, and are tenable for two years. These are awarded to students who have passed the Intermediate Examination from a College in Oudh, not being Government scholarship-holders, according to the order of merit in the Intermediate Examination.

#### **Endowments.**

#### **SETH JUBILEE SCHOLARSHIPS.**

In 1887, Seth Raghubar Dayal, Taluqdar of Moizuddinpur, Sitapur District, endowed the Canning College with a sum of Rs. 1,500 invested in Government Promissory Notes at  $3\frac{1}{2}$  per cent, to provide a scholarship\* to be awarded by the Vice-Chancellor, to a poor deserving student in the Sanskrit Department of the Canning College. The scholarship was founded to commemorate the Jubilee of Her Imperial Majesty Queen Victoria.

#### **MICHAEL J. WHITE MEMORIAL SCHOLARSHIP.**

In November, 1909, Mrs. T. MacMorran, daughter of Dr. Michael J. White, late Principal of Canning College, presented 12 Bengal Club Debenture Shares of Rs. 500 each to found a scholarship in memory of her father. In April, 1919, an additional gift of 50 Anglo-India Jute Mill Preference Shares of Rs. 100 each was made by Mrs. MacMorran. From the interest of this endowment two scholarships of Rs. 30 per month each for 10 months are awarded annually to M.A. students in English. The scholarship is known as the Michael J. White Memorial Scholarship.

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\*The Executive Council at its meeting held on October 18, 1929, decided that the value of the scholarship should be Rs. 5 per mensem.



## SURAJ NARAIN SCHOLARSHIPS.

Pandit Suraj Narain, retired Sub-Judge, by a Deed of Endowment dated June 18, 1912, endowed the Canning College with a Government Promissory Note of Rs. 5,000 bearing interest at  $3\frac{1}{2}$  per cent, to found two scholarships, one of Rs. 8 per month to be held by a B.A. student, one of Rs. 6 per month by an Intermediate student, preference being given to Kashmiri Brahmans. On August 24, 1921, Pandit Suraj Narain approved the proposal to convert the scholarship into two of Rs. 7 per month each to B.A. students.

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### Scholarships awarded in the Oriental Department of the Canning College.

#### I—CANNING COLLEGE SCHOLARSHIPS.

Six scholarships of the value of Rs. 8 per mensem each, tenable for ten months, are awarded to students of the Arabic and Persian as well as the Sanskrit Section of the Department.

#### II—PANDIT SURAJ NARAIN BAHADUR SCHOLARSHIP.

Endowment of Rs. 2,400 received from Pandit Suraj Narain Bahadur Saheb, invested in 6 per cent. U. P. Bonds, from which one scholarship of Rs. 6 per mensem tenable for twelve months, is awarded to a student of the Sanskrit Section of the Department.

#### III—SRI MAHABIRJI TEMPLE TRUST SCHOLARSHIP.

The Mahabirji Temple Trust Committee, formed under the orders of the late Court of the Judicial Commissioner, grants one scholarship of Rs. 5 per mensem, tenable for twelve months, to a student in the Sanskrit Section of the Department.



#### IV—PANDIT HAREY KISHEN GOUR SCHOLARSHIP.

Endowment of Rs. 1,300 received from Pandit Harey Kishen Gour Saheb, invested in 5 per cent Bonds of 1945-55, from which one scholarship of Rs. 5 per mensem, tenable for twelve months, is awarded to a student of the Sanskrit Section of the Department.

#### V—RAJA RAMESH SINGH SCHOLARSHIP.

In April, 1928, an endowment of Rs. 4,550 was received from the Raja Saheb of Kalakankar, invested in 5 per cent 1945-55 Government Bonds from which a scholarship of Rs. 6 per mensem, tenable for ten months, is awarded to a student in the Sanskrit Section of the Department. The scholarship is known as "Raja Ramesh Singh Scholarship."

#### F.—King George's Medical College Endowments.

##### BHINGA RAJ KSHATTRIYA SCHOLARSHIPS.

In December, 1895, a sum of Rs. 14,700 was invested by the Bhinga Raj with the Treasurer, Charitable Endowments, U. P., and Rs. 5,200 added in subsequent years, making a total investment of Rs. 19,900 in November, 1927, on the condition that the interest of the aforesaid sum be applied in furnishing five scholarships of the value of Rs. 12 per mensem each in the first and second year classes and Rs. 15 per mensem in the third, fourth and fifth year classes, to be held at the King George's Medical College, Lucknow, by persons of the pure Kshattriya race being residents of the U. P. of Agra and Oudh, in order to enable them to compete at the M. B. B. S. examination of the Lucknow University.

N. B.—The term Kshattriya does not include Khatris, Jats, Kayasthas, or any other caste which is not recognised by Kshattriyas themselves.



## RAJA RAGHUBAR DAYAL SCHOLARSHIPS.

In January, 1907, Seth Raghubar Dayal, Taluqdar of Moizuddinpur in the Sitapur District, offered a sum of Rs. 7,000 in  $3\frac{1}{2}$  per cent Government Promissory Notes to be vested with the Treasurer, Charitable Endowments, U. P., in order that the income arising from the same be applied to the provision of two scholarships of the value of Rs. 10 per mensem each tenable for one year, one by a male student and one by a female student, reading in the first year of the course.

The Principal of the King George's Medical College invested the following further sums out of the accumulated interest as part of the original endowment:—

January, 1914, Rs. 200 in  $3\frac{1}{2}$  per cent Promissory Notes of 1965.

May, 1917, Rs. 400 in 4 per cent Indian War Bonds of 1929-47.

November, 1940, Rs. 1,100 in stock of  $3\frac{1}{2}$  per cent loan of 1865.

In awarding the scholarships preference will be given in the following order:—

- (1) Khattris.
- (2) Hindu other than Khattris.
- (3) Others.

## CAPTAIN KUNWAR INDRAJIT SINGH SCHOLARSHIPS.

In April, 1922, Raja Sir Harnam Singh Ahluwalia, K.C.I.E., vested  $3\frac{1}{2}$  per cent Government Promissory Notes of 1854-55 of the value of Rs. 88,400 with the



Treasurer of Charitable Endowments for the territories subject to the Government of United Provinces of Agra and Oudh in order to found one or more scholarships to commemorate the memory of his son, Captain Kunwar Indrajit Singh, M.C., I.M.S. The conditions of award are as follows:—

Regulations. 1. Applicants for the Indrajit Singh scholarships should have a definite interest in their research subjects and should prepare a scheme indicating what they propose to do, together with estimates of costs. Each application should be made through the Head of the Department in which the work is intended to be done, and should have his approval and recommendation. Since also some of the clinical departments do not possess laboratories, applicants for scholarships should indicate where their laboratory work, if any, is intended to be done.

2. In order to give different departments as approximately equal opportunities for advancing knowledge, the order of rotation which should determine the allocation of scholarships and fellowships is: Ophthalmology, Physiology, Obstetrics and Gynæcology, Surgery, Radiology, Pharmacology, Pathology, Medicine, Anatomy. Any department which does not present an applicant at its due time in this cycle of departments must wait its time in the next cycle.

3. The Department of Hygiene should only be allotted a scholar in exceptional circumstances because it has its own staff of research workers paid by Government.

4. The ordinary tenure of the scholarship will be six months extenable to twelve. A further extension to two years may be granted provided the work done shows sufficient promise. The value of the scholarships shall be Rs. 100 per month, and from this a sum of Rs. 15 per



month will be retained and only paid to the scholar when he has completed his tenure of the scholarship. Money lapsing under this rule will be available for apparatus and equipment used for these researches.

The quarterly reports which the Trust Deed requires a scholar to make to the Principal shall be certified by the Head of the Department in which he works. The scholar shall have the right to publish the results of his researches under his own name subject to the discretion of the Head of the Department to add his name as well. The scholar shall also have the duties of stating that his work was done during the tenure of an Indrajit Singh Scholarship and of acknowledging help where this was given. But in those cases in which the results attained are not adequate for a definite publication in some journal, the scholar shall submit in triplicate his final report concerning the work done. One copy shall be kept in the department where the research was done, one shall be deposited in the College Library, and one sent to the Principal for forwarding to the Donor. When available the scholar shall submit reprints of published work for similar disposal.

#### *Leave Rules.*

1. Indrajit Singh Research Scholars are not ordinarily entitled to any leave during the tenure of their scholarship save on casual University holidays.

2. But on urgent private affairs and illness they may be granted leave on full pay by the Principal at the rate of one day for each month of service. Such leave may be granted at any time whether already earned or not.

3. At the expiry of their scholarship any leave granted to the scholars in excess of the rate of one day for each month of his service will be accounted for by the scholar either by an appropriate deduction of pay or by service without pay for the number of days taken by him in excess of leave due.



## CHAPTER VI

## NATIONAL CADET CORPS (SENIOR WING)

## 6th (U. P.) Battalion, National Cadet Corps.

1. Students and members of teaching staff of the Lucknow University are eligible for enrolment in the 6th (U. P.) Bn, National Cadet Corps.

The 6th (U. P.) Bn., N. C. C., is a two-company Battalion with an authorised strength of 325 including 10 Senior Grade Officers, 4 Under Officers and 311 Cadets.

2. The conditions of service are governed by the National Cadet Corps Act 1948 and the rules made from time to time.

3. Members will remain in the Corps so long as they continue to be students of the University or until discharged. On leaving the Corps they are under no further obligations.

4. *Conditions of Enrolment:*

(a) An under-graduate for enrolment shall have attained the age of 17 years and not more than the age of 26 years. Normally under-graduates of 1st, 2nd and 3rd years will only be enrolled.

(b) The under-graduates must serve a minimum of 2 years with the Unit.

(c) A Cadet for enrolment must be medically fit to do the training.



- (d) To attend at least 3 parades weekly during the session.
- (e) To complete 80 hours training during the first six months after the enrolment.
- (f) To attend the Annual Camp for a period not exceeding 15 days (attendance in Camp is compulsory).
- (g) To complete the Annual Musketry course; and
- (h) To attend all parades declared as compulsory.

5. If the percentage of attendance in classes or in hostel is deficient on account of attendance at the N. C. C. Camp or any special instruction arranged and certified by the Officer Commanding, N. C. C., credit may be given for the number of days on which the lectures were delivered or tutorial or practical work done during the period of attendance or participation aforesaid.

6. Uniform, Equipment and Rations during the Camp are provided free of charge, each member being responsible for the return in good condition of the articles issued to him.

Training usually continues from the beginning of the session to the end of February. During the training period Musketry and other competitions are held from time to time. There are prizes for smartness, shooting, all-round efficiency and sports.

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## CHAPTER VII.

### RECOGNITION OF THE DEGREES OF OTHER UNIVERSITIES BY THE UNIVERSITY.

The Degrees of the following Universities have been recognised as equivalent to the corresponding degrees of the University:—

- \*1. The University of Calcutta.
- \*\*2. The University of Bombay.
- †3. The University of Madras.
- ‡4. The Punjab University.
- \*5. The University of Allahabad.
- §6. The University of Patna.
- 7. The University of Rangoon.
- 8. The University of Dacca.

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\*The B.Com. degree of the Universities of Calcutta and Allahabad has also been recognised for the purpose of admission to the M.A. course in Economics and to the LL.B. course.

\*\*Except the B.Com. degree.

The M.B.B.S. degree of the University of Bombay has been recognised as equivalent to the M.B.B.S. degree of this University for purposes of admission to M.D., M.S. and other degree courses under the existing Ordinances and Regulations (subject to sanction by the Provincial Government).

†In addition to the recognition of the corresponding degrees the old M.A. degree of the Madras University for Science Graduates has been recognised as equivalent to the M.Sc. degree of this University.

‡The LL.M. degree of the Punjab University has been recognised as equivalent to the corresponding degree of this University for purposes of admission to the course of study for the LL.D. degree of the Lucknow University.

§The B.Com. degree of the Patna University has also been recognised as equivalent to the corresponding degree of this University for purposes of admission to the M.Com. course.

The B.Com. degree of the Patna University has also been recognised as equivalent to the corresponding degree of this University for purposes of admission to the LL.B. (Previous) class in the University.



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- \*9. The Banaras Hindu University.
  - 10. The Aligarh Muslim University.
  - 11. The University of Mysore.
  - 12. The University of Delhi.
  - \*\*13. The University of Nagpur.
  - †14. The University of Agra.
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\*The B.Com. degree of the Banaras Hindu University has also been recognised as equivalent to the B.Com. degree of this University, for purposes of admission to the courses of study for the M.Com. as well as for LL.B. degrees of this University.

The B.Com. degree of the Banaras Hindu University has also been recognised for purposes of admission to the course of study for the M.A. degree in Economics in this University.

\*\*The degrees of only the Faculties of Arts and Science have been recognised.

The B.Com. degree of the Nagpur University has also been recognised as equivalent to the B.Com. degree of this University for purposes of admission to the courses of study for the M.Com. and LL.B. degrees of this University.

The LL.B. degree of the Nagpur University has also been recognised as equivalent to the LL.B. degree of this University for purposes of admission to the LL.M. course.

†The degrees of only the Faculties of Arts and Science have been recognised.

The B.Com. degree of the Agra University has also been recognised for the purpose of admission to the M.A. course in Economics and to the LL.B. course.

The M.Sc. (Agr.) degree of the Agra University has been recognised as equivalent to the M.Sc. degree of this University for purposes of admission to the Ph.D. and D.Sc. courses of this University.



\*15. The Andhra University.

\*\*16. The Annamalai University.

†17. The Osmania University.

‡18. The University of Travancore.

\*The B.A., B.Sc. and B. Com. degrees have been recognised: the B. A. degree for the purpose of admission to the M.A. and LL.B. courses, the B.Sc. degree for the purpose of admission to the M.Sc. and LL.B. courses and the B.Com. degree for the purpose of admission to a course of study for the LL.B. degree and M.A. degree in Economics.

The M.A. degree of the Andhra University has been recognised as equivalent to the M.A. degree of this University for purposes of admission to Higher Courses of Study and Research in this University.

The B.Com. degree of the Andhra University has also been recognised as equivalent to the corresponding degree of this University for purposes of admission to the M.Com. course of this University.

The B.A. (Hons.), B.Sc. (Hons.), B.Ed., M.B.B.S. and B. L. degrees of the Andhra University have also been recognised as equivalent to the B.A. (Hons.), B.Sc. (Hons.), L.T., M.B.B.S. and LL.B. degrees of this University for purposes of admission to higher courses of study in this University (subject to sanction by the Provincial Government).

\*\*Only the B.A. and B.Sc. degrees have been recognised: the former degree for the purpose of admission to the M.A. and LL.B. courses and the latter degree for the purpose of admission to the M.Sc. course

†The B.A., B.Sc., M.A. and M.Sc. degrees of the Osmania University have been recognised as equivalent to the B.A., B.Sc., M.A. and M.Sc. degrees of this University for the purpose of admission to courses of study at this University.

‡The B.A. and M.A. degrees of the University of Travancore have been recognised as equivalent to the B.A. (Pass) and M.A. degrees of this University. The B.A. (Honours) degree has been recognised as equivalent to the B.A. (Honours) degree of this University, provided the Honours course at the University of Travancore extends over a period of three years.

The B.L. degree of the University of Travancore has also been recognised as equivalent to the LL.B. degree of this University for purposes of admission to the course of study for the LL.M. degree of this University.

The B.Sc., B.Sc. Honours and M.Sc. degrees of the University of Travancore have been recognised as equivalent to the B.Sc. (Pass), B.Sc. (Honours) and M.Sc. degrees of this University for purposes of admission.



\*19. The Utkal University.

†20. The Rajputana University.

\*\*21. The East Punjab University.

¶22. The Saugor University.

††23. The Gauhati University.

\$24. The Jammu and Kashmir University.

§25. The University of London.

\* The B.A. Pass and Honours, B. Sc. Pass and Honours and M.A. (English) degrees have been recognised as equivalent to the corresponding degrees of this University for purposes of admission to the higher courses of study in this University.

†The B.A., B.Sc., B.Com., LL.B., M.A., M.Sc. and M.Com. degrees of the Rajputana University have been recognised as equivalent to the corresponding degrees of this University for purposes of admission to this University.

\*\*The B.A., B.Sc., B.Com., LL.B., M.A., M.Sc. and M.B.B.S. degrees of the East Punjab University have been recognised as equivalent to the corresponding degrees of this University for purposes of admission to this University.

The B.Com. degree of the East Punjab University has also been recognised for purposes of admission to the LL.B. class and M.A. class in Economics (subject to sanction by the Provincial Government).

¶The B.A., B.Sc., B.Com., M.A. and M.Sc. degrees of the Saugor University have been recognised as equivalent to the corresponding degrees of this University for purposes of admission to this University.

††The B.A., B.Sc. and B.Com. degrees of the Gauhati University have been recognised as equivalent to the corresponding degrees of this University for purposes of admission to higher courses of studies in this University.

\$The B.A., B.Sc., B.T., B.Com., M.A. and M.Sc. degrees of the Jammu and Kashmir University have been recognised as equivalent to the corresponding degrees of this University for purposes of admission to higher courses of studies in this University.

§The B.A. and B.Sc. degrees of the University of London have been recognised as equivalent to the B.A. and B.Sc. degrees of this University for purposes of admission to the Master's degree.



\*26. The Karnatak University.

N. B.—(1) The degree of Master of Laws of the following Universities and the degree of Bachelor of Civil Laws of the University of Oxford have been recognised as equivalent to the degree of Master of Laws of the Lucknow University for purposes of admission to a course of study for the degree of Doctor of Laws of the Lucknow University:—

Cambridge, London, Birmingham, Sheffield, Liverpool, Harvard, Yale, Columbia, Allahabad, Calcutta, Madras, Bombay, Banaras Hindu University and the Punjab University.

(2) The Shastri degree of the Kashi Vidyapitha has been recognised as equivalent to the B.A. degree of a recognised University for purposes of admission in this University to the M.A. classes in History and Political Science. Such students shall also be eligible for admission to the LL.B. class of this University (subject to sanction by the Provincial Government).

(3) The degree of Master of Arts of Columbia University is approved for admission to the Licentiate in Teaching in this University.

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\*The B.A., B.Sc., M.A. and M.Sc. degrees of the Karnatak University have been recognised as equivalent to the corresponding degrees of this University for purposes of admission to higher courses of study in this University (subject to sanction by the Provincial Government).

The B.A. and B.Sc. degrees of the Karnatak University have also been recognised as equivalent to the corresponding degrees of this University for purposes of admission to the LL.B. class of this University (subject to sanction by the Provincial Government).

The LL.B. degree of the Karnatak University has also been recognised as equivalent to the corresponding degree of this University for purposes of study to the higher courses, provided the candidates seeking admission to the higher courses in this University possess a Bachelor's degree (subject to sanction by the Provincial Government).



## CHAPTER VIII.

### EXAMINATIONS\*

#### A.—General and Miscellaneous.

##### GENERAL.

(1) Admission of students to the University shall be made by an Admission Committee (including at least one Principal and one Provost) appointed for that purpose by the Academic Council.  
Section 34 of the Act

(2) Students shall not be eligible for admission to a course of study for a degree unless they have passed the Intermediate Examination of an Indian University incorporated by any law for the time being in force, or an examination recognised in accordance with the provisions of this Section as equivalent thereto, and possess such further qualifications (if any) as may be prescribed by the Ordinances:

Provided that until such recognised examination be established, students who have passed an examination for admission instituted by the University in accordance with the Ordinance shall be eligible for admission.

(3) The conditions under which students may be admitted to the Diploma courses of the University shall be prescribed by the Ordinances.

(4) The University shall not, save with the previous sanction of the Provincial Government, recognise (for the purpose of admission to a course of study for a degree)

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\*Teaching in the B.A., B.Sc., B.Com. and LL.B. classes has been started in Hindi and Urdu from the session 1946-47. For purposes of medium for University examinations, however, attention is invited to foot-notes at the beginning of each Chapter for the Faculties of Arts, Science, Commerce and Law.



as equivalent to its own degree any degree conferred by any other University or, as equivalent to the Intermediate Examination of an Indian University, any examination conducted by any other authority.

NOTE I.—The following examinations have been recognised as equivalent to the Intermediate Examination of an Indian University, for purposes of admission into the University:—

- (1) The Intermediate Examination of the Board of High School and Intermediate Education, U.P.
- (2) The Cambridge Higher School Certificate Examination.
- (3) The Intermediate Examination of the Board of Intermediate and Secondary Education, Dacca.
- (4) The Intermediate Examination of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior.
- (5) The Examination conducted by the Board of Secondary Education, United States of Madhya Bharat.
- (6) The Previous Examinations of Cambridge University.
- (7) The Responsions of the Oxford University.
- (8) The Intermediate Examination in Arts and Science of the Rangoon University for purposes of admission to the courses of study for the B A. and B.Sc. degrees of the Lucknow University.
- (9) The Pre-Engineering Examination conducted by the Pre-Engineering Examination Board, constituted by the Government of



India, as equivalent to the Intermediate Science Examination for purposes of admission to the Lucknow University.

- (10) The Final examination leading to the Licence of the State Medical Faculty. U.P., for purposes of admission of the Licentiates of the U.P. State Medical Faculty to the courses of study for the M.B.B.S. degree of the Lucknow University.

II.—The following Sanskrit examinations, with the English Examination of the Sanskrit Section in the Oriental Department, Lucknow University, or the Matriculation Examination in English of an Indian University established by Law, or of a Board of Education of any State in India, have been recognised as equivalent to the Intermediate Examination for purposes of admission to the Faculty of Medicine (Ancient and Modern):—

The Madhyama Examination of the Government Sanskrit College, Banaras, the Preliminary Examination for the Oriental Title of Shiromani of the Madras University, the Shastri Degree of the Lucknow University, the Shastri Examination of the Punjab University, the Shastri Examination conducted under the authority of the Government of Bihar and Orissa, or an equivalent examination of some other institution recognised by the University.

III.—The following examinations have been recognised as qualifying for admission to the Faculty of Commerce:—

- (1) The Intermediate Examination in Commerce of the Board of High School and Intermediate Education, U. P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-



- Merwara), Central India and Gwalior, or of the Nagpur University, or of the Patna University.
- (2) The Commercial Diploma Examination of the Punjab University, or of the Education Department of Delhi, Ajmer-Merwara and Central India.
  - (3) The Intermediate Examination in Arts (Group B—Special) of the Delhi University or in Commerce under the Faculty of Arts of the Banaras Hindu University, or in Commerce of the Aligarh Muslim University, or in Commerce of the Rajputana University, or in Arts (with Economics) or in Commerce of the Utkal University.
  - (4) The Intermediate Examination (Group E) of the Board of Intermediate and Secondary Education, Dacca.
  - (5) The Intermediate Examination of the Andhra University in three Commercial subjects, *viz.*, Accountancy, Banking and Economic Geography or Mathematics.
  - (6) The Intermediate Examination of the Calcutta University with Accountancy and one other Commercial subject.
  - (7) The Intermediate Examination in Arts of the Madras University with Accountancy and one other Commercial subject.
  - (8) The Intermediate Examination or the B. A. Examination of any recognised University, or the Intermediate Examination of the Board of High School and Intermediate Education, U.P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central



India and Gwalior, or of the Board of Intermediate and Secondary Education, Dacca, or of the Jammu and Kashmir University, or the Examination conducted by the Board of Secondary Education, United States of Madhya Bharat, with Economics as one of his subjects, provided on joining the Commerce Faculty of the University the candidate takes up Banking or Actuarial Mathematics for both the B.Com. Previous and Final Examinations.

(9) Part I of the Associate Examination of the Indian Institute of Bankers after passing the Intermediate Examination of the Board of High School and Intermediate Education, U.P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior, or of the Board of Intermediate and Secondary Education, Dacca, or the Intermediate Examination of an Indian University established by an Act of the Legislature.

(10) The All-India Senior Diploma Examination in Commerce conducted by the All-India Board of Commercial Studies, Delhi.

**I, P.--**Students who have obtained one of the following three Diplomas of the Lucknow University in Oriental Studies and passed the Intermediate Examination in English only shall be eligible for admission to the B.A. courses of the University with Language subjects only (*i. e.* Group (i)—(a) English, (b) Hindi or Urdu, and (c) Arabic or Persian or Sanskrit):—

(1) Acharya (2) Fazil (Arabic) (3) Dabir-i Kamil (Persian).



Students who have passed the B.A. Examination in the above Group of subjects will be permitted to go up for their M.A. Examination in any of the subjects offered by them for the Bachelor's degree.

[*Note.*—When the courses for the Diplomas are remodelled and include subjects corresponding to Intermediate courses in History, Economics, Civics, etc., the diploma-holders (having passed the Intermediate Examination in English only) will be eligible for admission to B.A. classes in all subjects].

Section 35  
of the Act (1) All arrangements for the conduct of examinations shall be made by the Academic Council in such manner as may be prescribed by this Act and the Ordinances.

(2) If any examiner is for any cause incapable of acting as such, the Vice-Chancellor shall appoint an examiner to fill the vacancy.

(3) At least one examiner, who is not a member of the University, shall be appointed for each subject included in a Department of teaching and forming part of the course which is required for a University degree.

(4) The Academic Council shall appoint committees, consisting of members of its own body or of other persons or of both, as it thinks fit to moderate examination questions and to report the results of the examination to the Executive Council for publication.

Ordinances 1. Except as provided in Ordinance 2 below a candidate, when admitted to one or more subsequent examinations, shall before admission pay the prescribed fee for such examination on each occasion when he is admitted.



2. A candidate who fails to pass or who from sickness or other cause\* is unable to present himself for any examination, shall not receive a refund of his fee; provided that the Executive Council may for sufficient cause permit the candidate to present himself for the next ensuing examination, without payment of a further fee. In such a case the application† must be submitted within one month of the date of commencement of the examination.

1. The University examinations shall ordinarily Regulations be held in the beginning of April.

2. The marks of the candidates for the University examinations shall be re-totalled on the application of a candidate on payment of Rs. 10.

No application for re-totalling shall be entertained unless it is made within 30 days of the publication of results.

3. The answer-books of the candidates shall be preserved only for three months from the date of publication of results.

4. A candidate appearing at a University examination will, on payment of Rs. 2, be communicated the total marks obtained by him in each Paper and Practical separately after publication of the list of successful candidates.

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\*Does not refer to students who are not permitted to sit for any examination owing to shortage of attendance.

†The Vice-Chancellor is authorised to dispose of such applications (*vide* Executive Council Resolution No. 19 dated April 11, 1930).



### \*MISCELLANEOUS.

Ordinances. 1. Students who have completed their course for the M.A., M.A. Part I, M.A. Part II, M.Sc. (in Mathematics), M.Sc. Part I (in Mathematics), M.Sc. Part II (in Mathematics), M.Com. Part I or M.Com. Part II examinations, or Diploma examinations in the Faculty of Medicine of the University but have failed to pass or appear in the examinations, may be permitted to appear or re-appear in the same examinations without further attendance at lectures, provided that their applications for permission to appear meet with the approval of the Head of the Department concerned. This permission may be extended to teachers of recognised educational institutions who have completed the course for the B. A. (Pass) and failed in that examination.

2-A. If the percentage of attendance in classes or in a Hostel is deficient on account of—

- (1) participation in Inter-University or other provincial matches or athletic meets, certified by the President of the Athletic Association concerned, and previously approved by the Vice-Chancellor;
- (2) attendance at all University educational excursions, certified by the Dean of the Faculty concerned;
- (3) attendance at a Conference or Congress recognised by the University and certified by the Dean of the Faculty concerned;

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\*Before preparing for an examination, ex-students and private candidates should ascertain from the Head of the Departments concerned as to whether examination papers for options offered will be available in any particular year.



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- (4) attendance as member at any inspection of an Ambulance or Nursing Division of St. John's Ambulance Brigade Overseas;
  - (5) attendance as member of an Ambulance or Nursing Unit at any *mela*, or a place of calamity;

credit may be given for the number of days on which lectures were delivered or tutorial or practical work done during the period of attendance or participation aforesaid, provided that the total absence shall not exceed 15 days in one academic year.

2-B. If the percentage of attendance in classes or in a Hostel is deficient on account of attendance at the N. C. C. Camp or any special instruction arranged and certified by the Officer Commanding, N. C. C., credit may be given for the number of days on which the lectures were delivered or tutorials or practical work done during the period of attendance or participation aforesaid.

3. Notwithstanding anything to the contrary prescribed by the Ordinances, the cases of shortage of attendance of students due to long and continued illness shall be considered by a Committee consisting of the Vice-Chancellor (*Chairman*), the Deans of the Faculties of Arts, Science, Law and Commerce and the Registrar.

4. Notwithstanding anything to the contrary prescribed by the Ordinances and Regulations, a student of the University who offers his services in connection with the War and attends to Military duty, or undergoes training for Military service, may be permitted to appear at a University Examination not earlier than the year in which he was due to appear, without completing the required percentage of attendance at lectures, tutorials, practicals or residence in a hostel. The period of his



attendance at military training or duty shall be excluded when calculating the percentages.

5. Where any person pursuing a course of study at any institution in or outside India is, on account of the prevailing War conditions, unable to continue it at such institution, he may, notwithstanding anything to the contrary contained in any Ordinances or Regulations, be admitted under the provisions of the Act to the University during the period of the War, and the University may grant and confer any degree and (or) other academic distinction to and on such person after he has pursued such course of study in the University and passed such examination and on such further conditions as the Dean of the Faculty concerned may, having regard to the courses of study pursued and the work done by such person in or outside India, determine subject to the approval of the Vice-Chancellor:

Provided that no person admitted to the benefit of this Ordinance shall obtain a degree or other academic distinction sooner than he would have obtained it if he had diligently pursued a normal course of study in India.

6. Where any person pursuing a course of study at any institution in or outside India, is on account of the conditions created by civil turmoil, unable to continue it at such institution, he may, notwithstanding anything to the contrary contained in any Ordinance or Regulation be admitted under the provisions of the Act to the University, and the University may grant and confer any degree and (or) other academic distinction to and on such person after he has pursued such course of study in the University and passed such examination and on such further conditions as the Dean of the Faculty, in consultation with the Heads of Departments concerned may, having regard to the course of study pursued and



the work done by a person in or outside India, determine subject to the approval of the Vice-Chancellor.

7. Notwithstanding anything to the contrary contained in the Ordinances or Regulations, enrolled students of the University who under the Defence of India Rules or the U. P. Maintenance of Public Order Act, 1947, are convicted by a Court of Law or detained by Government, may be permitted to appear at University examinations.

8. Notwithstanding anything to the contrary in any Ordinance:—

(i) A student in the Faculty of Arts or Science, belonging to the 2nd year B.A. or B.Sc. class, during the session 1942-43, (or any subsequent year till the termination of the War), who has passed the Terminal examination in all subjects and has joined Military service may be admitted to the B.A. or B.Sc. Degree by the Executive Council (on the recommendation of the Academic Council) if he has been in Military service for not less than six months.

(ii) A student in the Faculty of Law who has pursued a prescribed course of study for the LL. B. Previous Examination but having joined Military service is unable to appear in the examination until the termination of the War, may, on obtaining a certificate from the Dean of the Faculty, that the progress made by him as a student of the LL.B. Previous class was such as to make it highly probable that he would have passed the examination if he had not joined Military service, be admitted



to the LL.B. Final class, formed after his return from Military service without passing the LL.B. Previous Examination.

- (iii) Other cases of students in the Faculties of Arts and Science who have put in Military service may be considered on their own merits by the University on the recommendation of the respective Deans.
- (iv) A candidate who has paid the prescribed fee for an examination, but is called for active service, before he can take the examination, shall be entitled to a refund of the fee paid by him.

Regulations. 1. Persons who are not regular members of the University and who do not intend to proceed to any degree of the University may be permitted, subject to the approval of the Lecturer and the Head of the Department concerned, to attend courses of lectures given in the University. Teachers in schools situated within the territorial jurisdiction of the University shall be permitted to enjoy this privilege without payment of a fee. Other persons shall be charged a fee which shall not be less than that paid by the regular students of the University.

*Bona fide* students of other Universities may also be permitted to attend short courses of lectures without payment of fees, but if laboratory work is involved they will be required to pay fees for it, on a scale to be prescribed by the Executive Council.

2. Persons who are permitted to attend classes under Regulation 1 above shall be called "casual" students.



3. Such "casual" students should apply to the Vice-Chancellor, through the Head of the Department and the Dean of the Faculty concerned. The Vice-Chancellor may grant the permission required and shall fix the amount of fees to be paid by the student which shall not be less than prescribed for regular students of the University. This fee shall be payable in advance. The Head of the Department will not permit a "casual student" to attend classes or to use the laboratories until the fee is paid.

### B.—Conduct of Examinations.

Ordinances. 1. No candidate shall bring with him into the examination room papers, books, notes or any other similar material. Any candidate bringing into the examination room any papers, books, notes or other similar material will be fined Rs. 5 even though these notes are not on his person or table when he is answering his paper.

Provided that if the notes related to the question paper of the day, the candidate shall be dealt with under Ordinance 2.

2. Candidates found acting in a manner which, in the opinion of the invigilator or by the examiner conducting a practical or oral examination, is liable to give unfair advantage to him or to another candidate, shall be forthwith suspended for the examination of the day by the invigilator or the examiner. Such invigilator or examiner shall submit a report stating full facts of the case immediately to the Superintendent who shall submit the matter to the Vice-Chancellor for disciplinary action.

3. Any candidate who obtains or attempts to obtain any information about questions set in any examination



or communicate with or causes any person to communicate with an examiner with the intention of influencing him in the award of marks shall not be allowed to pass in that year and may in addition be debarred from examination for such period not exceeding the two following years as the Vice-Chancellor may, after considering the recommendations of the Results Committee, determine.

4. Any candidate who communicates with or causes any other person to communicate with an examiner with the intention of obtaining information about the marks secured by the candidate in any examination shall be fined Rs. 5.

5. If any question arises as to the interpretation of the foregoing Ordinances and as to whether a particular case comes within the scope of any one of them, the decision of the Vice-Chancellor thereon shall be final.

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## CHAPTER IX.

## THE EXAMINATIONS\*—FACULTY OF ARTS.

## A.—ORDINANCES AND REGULATIONS.

## Bachelor of Arts (General).

**These Ordinances apply both to B.A. (Pass) and B. A. (Hons.).**

1. Candidates shall not be admitted to the final examination or to any part of the examination prescribed for the degree of Bachelor of Arts unless they have:—

- (i) Completed a regular course of study as prescribed for that degree and furnished a certificate signed by the Dean of the Faculty that they have attended 75 per cent of the University lectures and tutorials (counted separately), in each subject offered by them for the examination.

\* (1) Teaching in the B.A. classes has been started in Hindi and Urdu from the Session 1946-47. The question-papers for the B. A. examinations of 1948-49 will be set in English and Hindi written in Devanagri script but with effect from the examinations of 1950 the question-papers shall be set in Hindi only, the script being Devanagri. Students will be given the option to answer the question-papers in English or Hindi written in Devanagri script upto the examinations of 1953 but with effect from the examinations of 1954 and onwards the answers shall be written in Hindi only, the script being Devanagri.

The question-papers in classical languages shall be either in Hindi written in Devanagri script in the case of Sanskrit and in Hindi or Urdu in the case of Persian, Arabic and Urdu or in English in the case of English. Students may be permitted to answer question-papers in Persian, Arabic and Urdu either in Hindi written in Devanagri script or in Urdu. Question-papers in European languages will be set and answered in English.

(2) No student in the University shall in future, be allowed to appear at two Degree examinations of this University in the same year vide Executive Council Resolution No. 16 (6) dated May 10, 1950).



Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone shortage of attendance to the maximum extent of 15 meetings in each subject of study, provided that the shortage in tutorials does not exceed six and provided further that in General English the maximum limit of shortage shall not exceed six lectures and tutorials taken together.

- (ii) fulfilled the conditions laid down for the residence of students;
- (iii) satisfied the requirements of the Regulations\* prescribed for the Test and Terminal examinations.

2. A candidate who has completed the required percentage of attendance fails to appear or pass an examination may be permitted to appear or re-appear at the same examination in a subsequent year without further attendance at lectures and tutorials, provided that his application for permission to appear meets with the approval of the Dean, Faculty of Arts. Such permission shall not be given in the case of subjects involving any practical work.

Provided further, that in the case of B.A. (Honours) examinations such permission shall be subject to provisions of Ordinances 3 and 7 for Bachelor of Arts (Honours).

### B.A. Preliminary Examination.

1. There shall be only one examination called the B.A. Preliminary examination at the end of the first year. The examination shall consist of two papers of 50 marks each in each subject except in
- Regulations.

\*These Regulations are printed after Ordinance 2.



**Military Science** in which there shall be two theory papers of 33 marks each and a practical examination of 34 marks.

2. The result of the Preliminary examination shall be considered by the Results Committee consisting of the Heads of Departments of the Faculty, with the Dean as Convener. The Committee shall decide all cases of promotions and their decision shall be final.

3. Absence from the examination for any reason whatsoever shall be reckoned as failure in the examination.

Absence on a day on which a student is to take a paper shall be reckoned as two days' absence for the purpose of counting 75 per cent attendance required for admission to the degree examination.

4. There shall be no supplementary examination after the B.A. Preliminary examination.

5. There shall be no Terminal examination in the 2nd year.

6. Terminal examinations of M. A. students may be held at the discretion of the Head of the Department.

7. In determining promotion from the first to the second year the following rules shall be observed:—

(a) Every candidate who obtains 33 per cent marks or more in each of the three subjects of examination shall be declared to have passed.

It shall be necessary to obtain pass marks in written and practical work separately in Military Science.



- (b) Every candidate who obtains 33 per cent or more marks in two subjects and not less than 25 per cent in the third shall be promoted.
- (c) All border line cases shall be decided by the Results Committee on the basis of Tutorial records.
- (d) The results shall be published by the Registrar.

### Bachelor of Arts (Pass).

1. Courses of study for the B. A. Pass degree shall extend over a period of two academic years, one of which shall be the academic year preceeding the examination, and the Degree Examination shall be held at the end of the second academic year.

A candidate who has appeared privately according to the Regulations for the B. A. Examination and has failed in that examination may be admitted on the recommendation of the Dean, Faculty of Arts, to the 2nd year B.A., in any succeeding session.

2. Every candidate shall be required to pass in a group of three subjects and General English. The following groups shall be permitted:—

(a) (i) A Classical Language,

or

Urdu,

or

Hindi;

(ii) History; and

(iii) Philosophy,

or

Political Science.



or  
Economics,

or

Anthropology,

or

Education.

(b) (i) English;

(ii) A Classical Language,

or

Urdu,

or

Hindi,

or

Education; and

(iii) Philosophy,

or

History,

or

Political Science,

or

Mathematics.

(Provided that arrangements can be made for teaching of subjects in this group).

(c) (i) English;

(ii) Economics,

or

Anthropology,

or

Philosophy; and



(iii) Mathematics,

or

Political Science,

or

A Classical Language,

or

Urdu,

or

Education,

or

Hindi.

(d) (i) English;

(ii) History,

or

Education; and

(iii) Economics,

or

Anthropology,

or

Political Science,

or

Philosophy.

(e) (i) History;

(ii) Economics,

or

Anthropology; and

(iii) Political Science,

or

Mathematics.



(f) (i) Philosophy;

(ii) Political Science,

or

Education; and

(iii) Economics,

or

Anthropology,

or

History.

(g) (i) Philosophy;

(ii) Economics,

or

Anthropology; and

(iii) Mathematics,

or

History.

(h) (i) English;

(ii) Philosophy; and

(iii) Economics,

or

Anthropology,

or

Education.

(i) (i) English,

or

History,

or

Economics,



or  
 Anthropology,  
 or  
 Philosophy,  
 or  
 Political Science;

(ii) Hindi,

or  
 Urdu;

(iii) Arabic,

or  
 Persian,  
 or  
 Sanskrit.

(j) Military Science may be offered in place of any one subject included in any of the groups (a)—(h).

(k) History and Culture of Asian Peoples may be offered in place of any one subject included in any of the groups (a)—(h).

Provided that it cannot be combined with a Classical and Modern Indian Language.

(l) (i) English;

(ii) Geography; and

(iii) Philosophy,

or  
 History,  
 or  
 Economics,



or  
Anthropology,  
or  
Political Science,  
or  
Hindi.

Provided that the above combination can be offered only by students of the Isabella Thoburn College.

\*(m) (i) Statistics;  
(ii) Mathematics; and  
(iii) Philosophy,

or  
Economics,  
or  
Anthropology.

or  
English,  
or

Political Science.

*Note*—Education shall not be combined with Military Science, and History and Culture of Asian Peoples.

3. Students who are reading for a Pass degree may, on the recommendation of the Head of the Department, be transferred by the Dean to an Honours course at any time up to the end of the first year of study.

†4. Notwithstanding anything contained in Ordinance No. 1 of Bachelor of Arts (Pass) and Ordinance No. 1 of Bachelor of Arts (General) a teacher in an

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\* This combination will be allowed subject to exigencies of the time-table.

† Application forms of teacher candidates for the examination will be accepted if they are countersigned by the Educational Authorities.



educational institution shall be eligible to appear\* at the examination provided:—

- (i) That by the date of examination not less than two academical years shall have elapsed since his passing the Intermediate Examination of an Indian University incorporated by Law or an examination recognised by the University as equivalent thereto, and
- (ii) That at the time of application he has been teaching for a period of at least 18 months in a recognised educational institution situated within the territorial jurisdiction of the University and duly certified by its Head, either—
  - (a) as a teacher of the University, or
  - (b) as a whole-time teacher of a school or college, or
  - (c) as a part-time teacher of a school or college, giving not less than twelve hours of instruction per week.

5. The examination for the degree of Bachelor of Arts shall be by means of papers:

Provided that candidates who have taken Military Science shall also be required to undergo a Practical examination including tests of physical fitness and endurance.

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\*Permission to appear as a teacher or as an ex-student will be subject to the general condition that only those options are offered in any particular year for which question-papers are being set for regular students.



or  
Anthropology,  
or  
Political Science,  
or  
Hindi.

Provided that the above combination can be offered only by students of the Isabella Thoburn College.

\*(m) (i) Statistics;  
(ii) Mathematics; and  
(iii) Philosophy,

or  
Economics,  
**OR**  
Anthropology.  
or  
English,  
or  
Political Science.

*Note*—Education shall not be combined with Military Science, and History and Culture of Asian Peoples.

3. Students who are reading for a Pass degree may, on the recommendation of the Head of the Department, be transferred by the Dean to an Honours course at any time up to the end of the first year of study.

†4. Notwithstanding anything contained in Ordinance No. 1 of Bachelor of Arts (Pass) and Ordinance No. 1 of Bachelor of Arts (General) a teacher in an

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\* This combination will be allowed subject to exigencies of the time-table.

† Application forms of teacher candidates for the examination will be accepted if they are countersigned by the Educational Authorities.



- (vi) Economics and Sociology.
- (vii) Arabic.
- (viii) Persian.
- (ix) Sanskrit and Prakrit Languages.
- (x) Mathematics.
- (xi) Hindi.
- (xii) Urdu with Persian.
- (xiii) Islamic Culture and Civilisation.

2. Students shall be admitted to the Honours course in the beginning provisionally, but they will be selected on the result of an examination (written and oral) to be conducted by the Heads of the Departments concerned at the beginning of the second term. Only those students alone who get 50 per cent or above marks be allowed to take up the Honours course.

3. Courses of study for the degree of B.A. Honours shall extend over a period of three academic years and there shall be an examination at the end of the third academic year. Students will not be permitted to enter for the examination for Honours later than the end of the fourth year from their admission to the B.A. course.

4. Every candidate for the degree of B.A. Honours shall, in addition to his Honours subject, be required to pass an examination in each of two subsidiary subjects and General English. The subsidiary subjects will be allied to the principal subject, which will be determined by the Head of the Department concerned, subject to the approval of the Dean.

5. The examination in the subsidiary subjects may be taken at the end of the second year, and shall be identical with the B.A. (Pass) degree examination in those subjects.



6. Names of successful candidates shall be arranged in three divisions. Candidates who obtain 60 per cent and upwards of the aggregate marks shall be placed in the first division. Candidates who obtain 48 per cent and upwards of the aggregate marks shall be placed in the second division. Candidates who obtain 36 per cent and upwards of the aggregate marks shall be declared to have passed and shall be placed in the third division. Names of successful candidates shall be classified in three divisions and arranged in order of merit within the first division and in alphabetical order within the second and the third divisions.

7. In order to pass, candidates must obtain 33 per cent of the total marks in each subject.

8. If a student gets at least 25 per cent marks in one subject and 40 per cent marks in each of the others he may be allowed to appear in the following July, in the subject in which he failed without further attendance at lectures and, if successful, shall be declared to have passed the examination without being placed in any division. Permission to appear in General English at the supplementary examination due in July, may be granted also to students who have passed the examination for the B.A. and B.Sc. degree (Pass or Honours) or B.Com. degree but have failed in General English.

### **Bachelor of Arts (Honours).**

1. There will be the following Honours Schools in Ordinances, the Faculty:—

- (i) English.
- (ii) Philosophy.
- (iii) European History.
- (iv) Indian History.
- (v) Political Science.



- (vi) Economics and Sociology.
- (vii) Arabic.
- (viii) Persian.
- (ix) Sanskrit and Prakrit Languages.
- (x) Mathematics.
- (xi) Hindi.
- (xii) Urdu with Persian.
- (xiii) Islamic Culture and Civilisation.

2. Students shall be admitted to the Honours course in the beginning provisionally, but they will be selected on the result of an examination (written and oral) to be conducted by the Heads of the Departments concerned at the beginning of the second term. Only those students alone who get 50 per cent or above marks be allowed to take up the Honours course.

3. Courses of study for the degree of B.A. Honours shall extend over a period of three academic years and there shall be an examination at the end of the third academic year. Students will not be permitted to enter for the examination for Honours later than the end of the fourth year from their admission to the B.A. course.

4. Every candidate for the degree of B.A. Honours shall, in addition to his Honours subject, be required to pass an examination in each of two subsidiary subjects and General English. The subsidiary subjects will be allied to the principal subject, which will be determined by the Head of the Department concerned, subject to the approval of the Dean.

5. The examination in the subsidiary subjects may be taken at the end of the second year, and shall be identical with the B.A. (Pass) degree examination in those subjects.



6. An Honours student shall, at the end of the second year, take the papers of the B.A. (Pass) examination in his principal subject. If he passes it and in the subsidiary subjects, he will graduate with the B.A. (Pass) degree. If he desires to proceed to the third year Honours class, he must get at least 48 per cent marks in the principal subject.

7. A candidate for an Honours degree who fails in one or both of the subsidiary subjects at the end of his second year may appear again at the end of the third or fourth year in the subject or subjects in which he has failed, provided that no candidate for an Honours degree will be permitted to appear for examination in his subsidiary subjects more than twice.

8. A candidate for an Honours degree who attains the necessary standard in his subsidiary subjects, but who fails to attain the Honours standard in his principal subject shall, subject to the provisions of Ordinance No. 1 (under "Bachelor of Arts—General") be allowed to present himself for re-examination in that subject at the end of the next year, and, if successful, shall be given an Honours degree, but without class.

9. Candidates who have failed to obtain Honours may, if they attain the prescribed standard, be recommended for a Pass degree.

10. If an Honours student, having completed his course of study, fails to obtain either an Honours or a Pass degree, he may be allowed to take the Pass examination in all the three subjects after one year of further study.

11. Students who hold a degree or who are eligible to appear in one subject only under Ordinance 8 for B.A. Pass and wish to take an Honours degree may



be admitted to the second year Honours class in the subject of their choice, which must be one of those taken for the Pass degree, and qualify by a two years course of study to appear at the examination in Honours.

Provided that the period may, by the Academic Council, on the special recommendation of the Dean, be reduced to one year in the case of students who have passed the B. A. Examination in the First Division.

12. Candidates who have passed the examination of one Honours School may, after pursuing a further course of study approved by the Dean for at least one and not more than two academic years, be admitted to the examination of any other Honours School. Such candidates shall be required to take the papers in the principal subject of their second Honours School only and not in any subsidiary subject.

13. Students who are reading for an Honours degree may, on the recommendation of the Head of the Department concerned, be transferred by the Dean to the Pass course.

14. A candidate who having completed a course of study is prevented by sickness from appearing in or completing the examination may supplicate for an *Aegrotat* degree. The cases of such candidates will be decided by the Academic Council upon the records of class work.

The degree will be described as an *Aegrotat*\* degree upon his diploma and for purposes of admission to subsequent examinations will be treated as a Pass degree.

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\**Aegrotat* degrees cannot be awarded to students who have not taken Honours course and Honours students can get only an *Aegrotat* Pass degree (*vide* Resolution No. 7 of Faculty of the Arts dated November 14, 1938).



15. Provided they have been teaching for a period of 18 months in a recognised educational institution situated within the territorial limits of the University, teachers who have passed the B.A. degree may, without residence, appear privately at the B.A. Honours examination in one of their degree subjects three years after graduating.

16. The examination for the degree of Bachelor of Arts with Honours shall be by means of papers.

17. Candidates who pass the examination shall be classified in three divisions:—

*First* division, candidates obtaining not less than 60 per cent of the total marks in the Honours subject.

*Second* division, candidates obtaining between 48 per cent and 60 per cent of the total marks in the Honours subject.

*Third* division, candidates obtaining between 36 per cent and 48 per cent of the total marks in the Honours subject.

Candidates obtaining not less than 30 per cent of the total marks in Honours subject may be allowed a Pass degree.

13. Names of successful candidates shall be published together with principal subject in which they have passed: they shall be classified in three divisions and arranged in order of merit within the first division and in alphabetical order within the second and third divisions.



### \*Examination in General English.

†1. The examination in General English for the B.A. and B. Sc. (Pass and Honours) and B. Com. candidates shall be the same as Paper I and Paper II of English (*General Section*) as detailed in the course of study in English for the B.A. (Pass) examination.

2. No candidate other than a teacher, or a B. Com. who has taken the degree prior to 1929, shall be permitted to appear in the examination for General English unless he has attended 75 per cent of the class lectures and tutorials for the same up to the date of the examination. Such attendance shall not be required for more than two academical years.

3. A candidate may take this examination in any year. He may be admitted to the examination for the B.A. or B. Sc. degree (Pass or Honours) or B. Com. Final examination, but shall not be eligible for the degree until he has passed the examination in General English.

*Note*—The fact that a candidate has passed the examination in General English shall be (mentioned in the Diploma).

### Master of Arts.

(*For Honours Graduates*)

1. Admission to the courses for the degree of Master of Arts shall be restricted to (a) candidates Ordinances. who have graduated with Honours at this University and (b) graduates with Honours of any

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\*The marks obtained by a candidate in General English shall not count for class or division in the Degree examination.

†Students of the B.A. (Pass) classes are permitted to take the Examination in General English at the end of the first year or second year even if they have offered English Literature as one of their subjects for the B.A. (Pass) Examination.



other recognised University\* provided that the regular courses for their Honours degree extended over three academic years, and that the applications of these candidates be approved by the Academic Council.

2. A candidate may, not less than one year after passing the B.A. Honours examination, present himself for the M.A. degree examination in the subject in which he took Honours.

A candidate who has passed the M.A. Part II examination in any subject may, for the purpose of this Ordinance be considered to have passed the B.A. Honours Examination in that subject and may present himself for the M.A. degree examination in the same subject after at least one year of his passing the M.A. Part II examination: provided that all papers to be taken by him are different from those formerly offered for the M.A. Part II examination already passed by him.

3. The degree of Master of Arts shall be conferred on candidates who have graduated with Honours, provided they have—

- (a) completed a further course of study or research approved by the University, subject to the provisions of Ordinance No. 1 under "Examinations—Miscellaneous";
- (b) fulfilled the conditions laid down for the residence of students; and
- (c) passed a prescribed examination which may include examination on a dissertation.

†4. A teacher who has passed the B.A. (Honours) examination may be permitted by the Academic Council

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\*For the list of approved Universities see Chapter VII.

†Application forms of teacher candidates for the examination will be accepted if they are countersigned by the Educational Authorities.



to appear privately at the M.A. examination in the subject in which he took Honours, not less than two years after graduation: provided that at the time of application he has been teaching for a period of at least 18 months in a recognised educational institution situated within the territorial jurisdiction of the University and is duly certified by its Head, *either—*

- (a) as a teacher of the University, or
- (b) as a whole-time teacher of a school or college,  
or
- (c) as a part-time teacher of a school or college  
giving not less than twelve hours of  
instruction per week.

*(For Pass Graduates)*

Ordinances. 1. The degree of Master of Arts shall be conferred on graduates who have pursued a regular course of study in the University for not less than two academic years since taking their Bachelor's degree and have fulfilled the conditions laid down for the residence of students and have passed the prescribed examination.

2. A student's choice of subject in the M.A. examination shall be restricted to one of the subjects taken for the Bachelor's degree.

Provided that:—

- (i) Candidates who have obtained the B. Com. degree of the University, or of the Agra University, or of the University of Allahabad, or of the Calcutta University, or of the Andhra University, or of the Banaras Hindu University, or of the East Punjab University, may be permitted to take up courses in Economics for the M.A. degree.



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- (ii) Graduates of other recognised Universities which have no independent course in Political Science may be permitted to take up courses in Political Science for the M.A. degree if their degree course has included both History and Economics with at least one paper in Political Science either in one subject or the other.
- (iii) Students who have taken the B.A. degree in History or Economics without Political Science as one of their subjects from any recognised University or the B. Com. degree of the Agra University may, not less than one year after graduation, appear without attending lectures in the one subject, *i. e.*, Political Science of the B.A. examination of this University, and if they pass in it may be permitted to take up courses in Political Science for the M.A. degree.
- (iv) A Master of Arts of the Lucknow University or any other recognised University may be permitted to take up courses for the M.A. degree in any other subject, which in the opinion of the Dean is allied to the one he took up for his M.A. degree previously.
- (v) Students who have taken the B.A. degree but who have not taken English or Hindi as one of the three subjects for the B.A. examination, or the B. Sc. or B. Com. degree of the University or of any recognised University may, not less than one year after graduation, appear without



attending lectures in the Special Section—English or Hindi, of the B.A. examination, and if they pass in it, may be permitted to take up courses in English or Hindi for the M.A. degree.

(vi) Students of the M.A. classes in Economics may be permitted to appear at the M.A. Statistics paper in Economics on payment of one-third of the Tuition fee prescribed for the M.A. examination and Examination fee of Rs. 10, and if successful be granted a certificate to that effect.

(vii) Students who passed the B.Ed. Sc. examination of the University may be admitted to take up courses in Philosophy (Psychology Group) for the M.A. degree.

(viii) Students who have obtained the B.Sc. degree of this University or of any other approved University with Zoology as one of the subjects may be admitted to the M.A. Part I class in Anthropology (Physical).

3. The examination shall consist of two Parts, Part I and Part II.

4. A student after completing a regular course of study for not less than one academic year shall be admitted to Part I of the M.A. examination of that year.

5. Part II of the examination in any subject shall be open to all students who have since passing Part I in that subject prosecuted a regular course of study for not less than one academic year subject to the provisions of Ordinance No. 1 under "Examinations—Miscellaneous."



6. Divisions shall be awarded on the combined result of the examination in Part I and II.

\*7. A teacher who has taken the Bachelor's degree of the University or of any approved University may be permitted, by the Academic Council, to appear† privately at Part I of the M.A. examination, not less than two years after graduation: provided that he is either:—

- (a) a teacher of the University, or
- (b) a whole-time teacher or a part-time teacher, giving not less than 12 hours' instruction per week, who has been regularly employed for a period of at least 18 months in a school or college situated within the territorial jurisdiction of the University and recognised by the University for the purpose.

Part II of the examination shall be open† to teachers who have passed the Part I examination, provided they have been teaching continuously in a recognised educational institution situated within the territorial jurisdiction of the University during the intervening year.

Teachers may be permitted to appear† privately at the M.A. examination in those subjects in which regular students are admitted under the provisos to Ordinance 2 *supra*.

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\*Application forms of teacher candidates for the examination will be accepted if they are countersigned by the Educational Authorities.

†Permission to appear as a teacher or an ex-student will be subject to the general condition that only those options are offered in any particular year for which question-papers are being set for regular students.



(For both Pass and Honours Graduates)

1. The examination for the degree of Master of Arts shall be by means of papers, provided that in cases so specified, a thesis may be offered in lieu of one of the papers or in lieu of two papers (Papers III and IV) in Political Science and that if the examiners of the thesis consider it necessary the candidate who offers the thesis may be required to undergo a *viva voce* test on the subject of the thesis.

Candidates shall also be required to undergo a *viva voce* test in the Final examination except in the case of Mathematics.

2. Names of successful candidates shall be published in such form as to indicate the subjects in which they have passed and to show whether they have presented any dissertation; and shall be arranged in three divisions:—

- (i) *First* division, candidates obtaining 60 per cent and over of the aggregate.
- (ii) *Second* division, candidates obtaining below 60 per cent but not less than 48 per cent.
- (iii) *Third* division, candidates obtaining below 48 per cent but not less than 36 per cent.

The names of those who pass in the First division shall be arranged in order of merit and of those who pass in the Second and Third divisions in alphabetical order.

\*3. Under no circumstances shall a candidate who in the M.A. examination or in Parts I and II, fails to secure 30 per cent marks in more than one paper be certified to have passed the examination.

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\*NOTE—Notwithstanding anything to the contrary contained in the Ordinances, M.A. examination in Mathematics shall be governed by the Ordinances prescribed for the M.Sc. examination in Mathematics.



4. A "regular course of study" means attendance at not less than 75 per cent of the lectures constituting the course of study in a particular subject:

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone shortage of attendance to the maximum extent of 25 lectures in each subject.

5. The subject of the examination shall be one of the following:—

- (i) A language.
- (ii) Mental and Moral Science.
- (iii) History.
- (iv) Mathematics.
- (v) Economics.
- (vi) Political Science.
- (vii) Islamic Culture and Civilization.

6. The scope of the subject shall be as indicated in the syllabus.

*Procedure to be followed in connection with the thesis in the M.A. Examination.*

Regulations. 1. Every candidate presenting a thesis in lieu of a paper or in lieu of two papers (Papers III and IV) in Political Science in the M.A. examination, shall apply for permission to do so not later than the first week of the second term. He shall at the same time declare the topic on which he intends to submit his Thesis.

2. The permission to present a thesis shall be granted by the Dean of the Faculty on the recommendation of the Head of the Department concerned. The names of such candidates together with the topic chosen shall be recorded in the Registrar's Office.



3. Permission to change a thesis for a paper or the subject of the thesis shall not be granted after the end of the second term.

4. A candidate shall submit his thesis to the Registrar a fortnight before the commencement of the examination.

5. The Registrar shall deal with the Thesis\* in the same way as he deal with the examination answer-books.

6. The Thesis shall be jointly valued by an external and internal examiner. The candidates, if considered necessary by the examiners, may be required to undergo a *viva voce* test on the subject of the Thesis but no additional marks will be awarded for the test.

### ‡ Doctor of Philosophy

†1. Application for permission to enter upon a course of study for the degree of Doctor of Philosophy must be made at the commencement of any University term through the Head of the Department concerned, and the

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\* Thesis approved by examiners shall be kept by the University for five years (*vide* Resolution No. 15 of the Executive Council dated October 31, 1930).

†It is not necessary for Masters of Arts of the Lucknow University to be formally admitted to the Ph.D. class before commencing research work.

‡(i) These new Ordinances are in force from the Session 1937-38. The old Ordinances shall continue to apply to those students who had already joined the Ph.D. class *before* the Session 1937-38.

(ii) Students admitted to the Ph. D. class for research in Human Relations at the J. K. Institute shall be admitted on the recommendation of the Director of the J. K. Institute and the Dean, Faculty of Arts, and shall be governed by these Ordinances subject to the modification that the words "the Director of the J. K. Institute" shall be substituted for the words "the Head of the Department" wherever occurring in these Ordinances.



Dean of the Faculty of Arts, mentioning the name of the teacher under whom a candidate proposes to work and also the subject of research.

\*2. The Faculty shall approve the subject offered by the candidate for his research, and also the Supervisor under whose guidance the candidate proposes to work.

3. A candidate for the degree of Ph.D. shall have taken the M.A. degree of this University or of any approved University.\*\*

Provided that the Faculty may grant permission to a candidate who has taken the M.Sc. degree of this or of any approved University on the recommendation of the Dean and the Head of the Department concerned, to enter upon a course of study for the Degree of Ph.D. on condition that the candidate satisfies the Faculty that he has passed some test in the subject in which he wishes to take his Ph.D.

4. Before a candidate is permitted to supplicate for the degree of Ph.D. he must be certified by the Head of the Department and the Dean to have been engaged in his research work for not less than two academic sessions or six terms.

5. Candidates who have taken the M.A. degree of the Lucknow University may be exempted from residence in Lucknow by permission of the Dean of the recommendation of the Head of the Department concerned.

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\*The Head of the Department concerned, on the recommendation of the Supervisor, is authorised to submit to the Faculty his proposal about the change in the allotment of subject for the Ph.D. degree to any student who does not show any progress in his research for one session (*vide* Academic Council Resolution No. 19 dated December 8, 1949).

\*\*For the list of approved Universities see Chapter VII.



6. Candidates who have taken the M.A. degree of any other University shall be required to reside in Lucknow for six terms before presenting their dissertation. The Head of the Department may grant permission to a candidate to reside outside Lucknow for purpose of collecting materials for his thesis for not more than three terms out of these six terms; such exemption shall not be granted either for the first term or for the last (*i. e.*, the sixth) term, nor for more than two consecutive terms.

7. Teachers and Research Assistants† in the University who hold the degree of M.A. of this or any other University, may be permitted by the Faculty to present a thesis for the degree of Doctor of Philosophy after three years service in the University. They will be required to notify the Registrar at least six months before the date on which they propose to present the thesis.

8. A candidate will not be eligible to supplicate for the Degree of Doctor of Philosophy unless he has obtained a Certificate of Proficiency in French or German, or Italian, or Spanish, or Russian of this or any other approved University (or its equivalents).

9. A candidate for the degree of Doctor of Philosophy must submit three printed or type-written copies of the thesis, accompanied by the prescribed fees. He shall also submit a brief abstract of his thesis and indicate in a prefatory note what part of the thesis he claims as original and what sources he has used.

10. A thesis which has already been presented for the M.A. degree will not again be accepted for the degree of Ph.D., but it may be wholly or partly included in an extended investigation, provided that the part so included

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†'Research Assistants' means a person assisting a teacher in his research work and recognised by the Executive Council as such.



be clearly indicated. The thesis shall embody a definite contribution to knowledge.

11. If the examiners consider the thesis to be of sufficient merit they may recommend that the candidate should receive the degree without further examination or they may require him to undergo an examination which may be written or oral or both, on the subject of his thesis.

12. The report of examiners shall be laid before the Results Committee. If the Committee is satisfied that the reports of the examiners are unanimous and definite, they may recommend to the Executive Council that the result be published. If, however, the reports show a divergence of opinion between the examiners, the Committee may direct that the reports be exchanged between them, the examiners being requested to submit a joint report if possible. The Committee may, at its discretion and shall if the reports are conflicting even after an exchange of views, refer the thesis to another external examiner.

13. A printed or type-written copy of each accepted thesis will be lodged in the University Library where it will be open to public inspection.

A summary of not more than 1,000 words shall also be furnished by the candidates, to be published as the University may direct.

14. The dissertation submitted for the degree of Ph.D. shall be on some branch of one of the following subjects:—

- (i) Philosophy.
- (ii) History.
- (iii) Economics and Sociology.



- (iv) Mathematics.
- (v) English.
- (vi) Sanskrit.
- (vii) Arabic.
- (viii) Persian.
- (ix) Political Science.
- (x) Urdu.
- (xi) Hindi.
- (xii) Statistics.

\*Doctor of Literature.

1. Applicants for the degree of Doctor of Literature shall have taken the Ph.D. degree of the Lucknow University or any other approved University not less than five years before submitting their work for the D.Litt degree.
- Ordinances.

Provided that a candidate who has not taken the Ph.D. degree from this University shall have carried on research for not less than three terms under the supervision of the University.

Provided further that the period of five years may be reduced in the case of Ph.D.'s who are first class M.A.'s of more than 10 years' standing with the approval of the Head of the Department concerned and the Dean of the Faculty of Arts.

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\*Students admitted to the D. Litt. class for research in Human Relations at the J. K. Institute shall be admitted on the recommendation of the Director of the J. K. Institute and the Dean, Faculty of Arts, and shall be governed by these Ordinances subject to the modification that the words "the Director of the J. K. Institute" shall be substituted for the words "the Head of the Department" wherever occurring in these Ordinances.



The candidate shall notify to the Registrar at least six months before he proposes to submit his work.

*Exception.*—Teachers and Research Assistants, who have previously obtained the Master's degree and have been in the service of the University for not less than ten years, may be permitted by the Faculty to supplicate for the D.Litt. degree without having first obtained the Ph.D. degree.

2. The Faculty shall approve the subject of the candidate and appoint a Supervisor to guide his research.

3. Every candidate for the D.Litt. degree should submit the whole of the research work with all particulars about the portions which he claims as his own and what had been previously submitted and approved for another degree. Joint work may be submitted in support of candidature, but the degree shall not be awarded solely on the basis of this work.

4. Candidates who have obtained the Ph.D. degree under Ordinances in force up to 1937, which provided for only one Doctor's degree, may supplicate for the D.Litt. degree on the basis of their work submitted for their Ph.D. degree and any additional work, that may be available, provided that the examiners shall be notified that the previous work has already been submitted and approved for the degree of Ph.D.

5. There shall be no *Viva Voce* examination.

\*6. The degree of D.Litt. will not be awarded until the work approved for it has been published and three copies have been sent to the Registrar.

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\*6-A. Notwithstanding anything contained in Ordinance 6, the degree may be awarded even without the publication of the thesis which may be deferred till 1950.



7. A candidate for the degree of Doctor of Literature must submit three printed or type-written copies of the thesis accompanied by the prescribed fees. He shall also submit a brief abstract of the thesis and indicate in a prefatory note what part of the thesis he claims as original and what sources he has used.

8. A thesis which has already been presented for the Ph.D. degree will not again be accepted for the degree of D.Litt., but it may be wholly or partly included in an extended investigation, provided that the part so included be clearly indicated. The thesis shall embody a definite contribution to knowledge.

9. If the examiners consider the thesis to be of sufficient merit they may recommend that the candidate should receive the degree without further examination or they may require him to undergo an examination on the subject of his thesis.

10. The report of examiners shall be laid before the Results Committee. If the Committee is satisfied that the reports of the examiners are unanimous and definite, they may recommend to the Executive Council that the result be published. If, however, the reports show a divergence of opinion between the examiners, the Committee may direct that the reports be exchanged between them, the examiners being requested to submit a joint report if possible. The Committee may, at its discretion and shall if the reports are conflicting even after an exchange of views, refer the thesis to another external examiner.

11. A printed or type-written copy of each accepted thesis will be lodged in the University Library where it will be open to public inspection.



A summary of not more than 1,000 words shall also be furnished by the candidate, to be published as the University may direct.

12. The dissertation submitted for the degree of D.Litt. shall be on some branch of one of the following subjects:—

- (i) Philosophy.
- (ii) History.
- (iii) Economics and Sociology.
- (iv) Mathematics.
- (v) English.
- (vi) Sanskrit.
- (vii) Arabic.
- (viii) Persian.
- (ix) Political Science.
- (x) Urdu.
- (xi) Hindi.
- (xii) Statistics.

### Doctor of Literature (Honoris Causa)•

The degree of Doctor of Literature may be conferred as an honorary degree in accordance with the provisions of Statute 14, upon any person, on the ground that he is, by reason of eminent position and attainments or by virtue of his contribution to the cause of learning, a fit and proper person to receive such a degree.

Ordinance.



## LICENTiate IN TEACHING.

### *I.—GENERAL.*

1. A Licentiate in Teaching may be granted to graduates who have successfully undergone  
Ordinances. a course of studies, both theoretical and practical for one academical year in the University.

2. The Committee of Courses and Studies in Philosophy will suggest courses of study for the Licentiate in Teaching.

3. A candidate shall not be admitted to the course of study for the Licentiate in Teaching unless he or she has graduated in Arts, or Science, or Commerce, or Agriculture in this or any other recognised University, or holds a degree or diploma which the Academic Council may approve\* for admission to this course.

### *II.—EXAMINATION.*

4. The examination for the Licentiate in Teaching shall be both in the Theory and Practice of  
Ordinances. Teaching. There will be four papers in Theory and an examination of two lessons in Practice of Teaching.

The four papers are as follows:—

- (a) Educational and Experimental Psychology.
- (b) History of Education.
- (c) Principles and Method of Education.
- (d) School Management and Hygiene.

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\*The degree of Master of Arts of Columbia University is approved for admission to the Licentiate in Teaching.



For women candidates who desire an endorsement on their diploma of a qualification to teach singing, there will be an oral examination including (1) a test song, (2) sight reading test, (3) ear tests.

A paper will also be set in each of the special subjects offered by candidates who desire to have an endorsement on the diploma of special qualifications for teaching one or more branches of the High School curriculum.

In the Practice of Teaching every candidate shall be expected to deliver at least 60 lessons during the session in addition to 20 supervised lessons in special subjects, if offered.

5. (a) The Practical examination shall be conducted by three examiners one of whom shall be internal.

(b) Every candidate shall teach two lessons in subjects embraced in the High School curriculum at least one of which must be one of the main subjects of the curriculum, *e. g.*, English, Hindi, History, Geography or Mathematics.

(c) The examination in the Practice of Teaching shall be conducted in a practising school approved by the Department, and the examiners shall also take into consideration the work done by the student during the course of training.

(d) At the time of the examination, the examiners will have before them the opinion of the Head of the Department on each candidate. The examiners will give full consideration to this opinion in awarding marks, but the final decision will be with the examiners.

(e) The candidates shall receive due notice of the subjects in which they will be asked to give a lesson.



6. (a) Candidates who fail in the examination in the Practice of Teaching may present themselves for re-examination therein at a subsequent examination, without attending a further course, provided that they produce satisfactory evidence that, in the interim period they have been teaching in a recognised institution.

(b) Candidates who fail in the examination in the Theory of Teaching may present themselves for re-examination therein at a subsequent examination, without attending a further course.

(c) Candidates who fail both in written papers and the Practice shall have to attend a further course of lectures and practicals.

7. (a) Candidates who desire to have an endorsement on their diploma of special qualifications for teaching any subjects of the High School curriculum, may take an additional paper in any of the special subjects offered.

(b) Those desiring this endorsement must submit their names for a special examination in a specified subject. With the approval of the Department the examination will be given, and an indication of special qualifications for teaching this subject will be given on the diploma of successful candidates.

(c) For these candidates one of the Practice teaching lessons delivered for the examination shall be on the subject in which he/she specializes.

(d) No such endorsement will be given unless the candidate secures at least fifty per cent marks in both the written paper and the practical examination in the special subject.

If the candidate fails in this special paper he/she will get an ordinary diploma without the endorsement.



8. Holders of the Licentiate in Teaching may at any subsequent examination appear for a special examination in Theory and Practice in any additional subject, provided that—

- (a) they take the regular course prescribed for the special subject;
- (b) they teach twenty supervised lessons;
- (c) they must obtain fifty per cent marks in both the written and practical examination in the special subject.

### *III.—MODERATION OF QUESTION-PAPERS*

9. Moderation of question-papers shall be done by a Board of Moderators in Philosophy.

### **MASTER IN EDUCATION.**

1. Admission to the courses for the Degree of Master in Education shall be restricted to the Ordinances. graduates of the Lucknow University or any other recognised University.

2. The courses of study shall extend over a period of two academic years.

3. Graduates possessing a Degree or Diploma in Teaching or an equivalent qualification from a recognised University (B.Ed.Sc., L.T.) shall be exempted from the first year's course.

4. The Degree of Master in Education shall be conferred on candidates who have pursued a regular course of study in the University and have fulfilled the conditions laid down for the residence of students and have passed the prescribed examination.



5. The examination for the second year's course shall consist of five papers and practical work.

6. Names of successful candidates shall be arranged in three divisions, to be arranged in alphabetical order, within the division, as under:—

*First* division, candidates obtaining 60 per cent and over of the aggregate.

*Second* division, candidates obtaining below 60 per cent but not less than 50 per cent.

*Third* division, candidates obtaining below 50 per cent but not less than 40 per cent.

7. Under no circumstances shall a candidate who in the M. Ed. examination fails to secure 30 per cent marks in more than one paper be certified to have passed the examination.

8. A "regular course of study" means attendance at not less than 75 per cent of the lectures and of the practical exercises constituting the course of study.

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone a shortage of attendance to the extent of six lectures and six practical classes.

9. Students who have completed their course for the Master in Education examination but have failed to pass or to appear at the examination, may be permitted to appear at the same examination, a second time, without further attendance at lectures if their applications for permission meet with the approval of the Head of the Department of Philosophy and the Dean, Faculty of Arts: provided that a student who failed in the practical shall be required to undergo (after the April examination) a fresh course of Practical training at the University during the Dasehra or Christmas recess on payment



of a fee of Rs. 20 for which training the University shall provide suitable arrangements.

Provided further that students, who pass in the practical examination but fail in written papers only, may be permitted to appear at the next examination without further attendance at practicals or lectures.

Candidates allowed to appear at the Master in Education examination under this Ordinance shall be required to pay the full Examination fee of Rs. 50.

A student who fails to pass the Master in Education examination, after having been permitted under this Ordinance, shall, if appearing in a subsequent examination, be required to undergo a fresh "regular course of study."

10. A student who has already passed the B. Ed. Sc. examination from the Lucknow University may be awarded the degree of 'Master in Education' if he appears and is successful at a subsequent examination in two papers of M. Ed., or a Thesis, *viz.*

(1) Philosophy of Education .... Paper I.

(2) Comparative Education .... Paper III.  
or Thesis.

(a) A Tuition fee of Rs. 60 per session will be charged from students who will be admitted under this Ordinance.

(b) The fee for this examination under this Ordinance will be Rs. 30.

(c) A student who fails to pass will be required to undergo a fresh regular course of study.

(d) The thesis under this Ordinance will be for 200 marks.

(e) Students passing under this Ordinance will be awarded a Pass degree.



Ordinances.

*B—SCHEME OF EXAMINATIONS***B.A. Pass.**Marks in each  
Paper.

Three Papers in each subject (excluding General Section in English, Political Science, and Military Science) and in Special Section in English	....	....	50
Two Papers of General Section in English	....	....	75
First Paper in Political Science	....		45
Second Paper in Political Science			45
Third Paper in Political Science	....		60

*Time allowed for each Paper—3 hours.*

Minimum pass marks in each subject .... 33 per cent.

Minimum pass marks in the aggregate .... 36 per cent.

**Military Science.****Two Theoretical Papers:—**

Each Paper	....	.... 50 marks.
Practical Test	....	.... 50 marks.

*Time allowed for each Paper—3 hours.*



Candidates taking Military Science as a subject are required to pass in the Theory and Practical examinations separately.

Minimum pass marks for Theory .... 33 per cent.

Practical .... 33 per cent.

<i>First</i> division, 60 per cent and above	} of the aggregate marks.
<i>Second</i> division, below 60 per cent but not less than 48 per cent	
<i>Third</i> division, below 48 per cent but not less than 36 per cent	

### Geography.

A. Written Examination—2 Theoretical Papers :

Each Paper .... 50 marks.

B. Practical Examination .... 50 marks.

(i) A written paper ... 20 marks.

(ii) A field work exercise .... 20 marks.

(iii) Record book of practical work ... 10 marks.—

*Time allowed for each Paper—3 hours.*

Candidates are required to pass in the Written and Practical examination separately.

Minimum pass marks for Written examination....33 per cent.

Minimum pass marks for Practical examination....33 per cent



**B. A. Honours.**

Each Paper in each subject .... 100 marks.

*Time allowed for each Paper—3 hours.*

Minimum pass marks, 36 per cent of the aggregate marks in each subject.

Candidates obtaining from 30 to 35 per cent of the total marks in the Honours subject may be awarded a Pass degree.

<i>First</i> division, 60 per cent and above	} of the total marks in the Honours sub- ject.
<i>Second</i> division, below 60 per cent not less than 48 per cent	
<i>Third</i> division, below 48 per cent but not less than 36 per cent	

**M. A. Part I.**

Each Paper in each subject .... 100 marks.

*Time allowed for each Paper—3 hours.*

Minimum pass marks, 36 per cent of the aggregate marks in each subject.

**M. A. Part II.**

Each Paper in each subject .... 100 marks.

Thesis .... 100 marks.

Thesis in case of Political Science.... 200 marks.

*Viva Voce* .... 100 marks.

*Time allowed for each Paper—3 hours.*

Minimum pass marks in each subject, 36 per cent.

<i>First</i> division, 60 per cent and above	} of the aggre- gate marks of the combined results of Parts I and II.
<i>Second</i> division, below 60 per cent but not less than 48 per cent	
<i>Third</i> division, below 48 per cent but not less than 36 per cent	



**M. A.**

Each Paper in each subject .... 100 marks.

Thesis .... 100 marks.

Thesis in case of Political Science.... 200 marks.

*Viva Voce* .... 100 marks.

*Time allowed for each Paper—3 hours.*

First division, 60 per cent and above	} of the aggregate marks.
Second division, below 60 per cent but not less than 48 per cent	
Third division, below 48 per cent but not less than 36 per cent	

**L. T.**

Four Papers, each .... 100 marks.

Practical Test (one hundred marks  
for each lesson) .... 200 marks.

*Time allowed for each Paper—3 hours.*

Minimum pass marks in Theory shall be 36 per cent  
of the aggregate marks for the four papers.

Minimum pass marks in Practical Test....36 per cent.

The candidates must gain at least 24 per cent of the  
maximum marks for each Paper separately.



Successful candidates shall be placed in three divisions, both in Theory and Practical examination separately as under:—

*First* division, candidates obtaining 60 per cent or more of the aggregate marks.

*Second* division, candidates obtaining not less than 48 per cent and not more than 59 per cent of the aggregate marks.

*Third* division, candidates obtaining not less than 36 per cent and not more than 47 per cent of the aggregate marks.

Special subject—one paper .... 100 marks.

Practical Test — .... 100 marks.

Minimum pass marks in Practical and Theory separately .... 50 per cent.

*Time allowed for each written Paper—3 hours.*

### M. Ed.

Five Papers, or a thesis in lieu of Paper V, each .... 100 marks.

Practical Test .... 100 marks.

*Time allowed for each Paper—3 hours.*

Minimum pass marks in the aggregate of Written Papers .... 40 per cent.

Minimum pass marks in Practical Test....40 per cent.

<i>First</i> division	60 per cent	} of the aggregate marks.
<i>Second</i> division	50 per cent	
<i>Third</i> division	40 per cent	



**C—COURSES OF STUDY.****ENGLISH.****B.A. Pass.**

There will be *five* papers as follows:—

**A.—GENERAL SECTION.**

*(For the Examinations of 1952 and after)*

*Paper I.*—The paper will consist of short essays of a general nature on the subject-matter of the books prescribed and also of other exercises in composition.

*Books prescribed (for general study):*

1. Dent: Modern Short Stories.

Or

One Act Plays of To-day: (Fourth Series)  
(Harrap).

2. Hardy: Far from the Madding Crowd.
3. Quiller-Couch: The Art of Writing.
4. Eve Curie: Life of Madame Curie (Pocket Books, New York).

Or

Mason: Readings from the Scientists (Macmillan).

*Paper II.*—An essay on a general subject. A large field of choice will be given. The subjects will be so varied as to have a bearing on the different courses, and some of the alternative essays will relate to Indian life and thought.

**B.—SPECIAL SECTION.**

*(For the Examinations of 1952 and after)*

*Paper I—Prose:*

1. Strachey: Queen Victoria.
2. Newbolt: Essays and Essayists: From Steele to Chesterton (Nelson).



*Paper II.—Drama:*

1. Shakespeare: A Midsummer Night's Dream.
2. Shakespeare: Othello.
3. Shaw: Candida.

*Paper III.—Poetry:*

1. Longer Poems, Old and New (selected by Cairncross, Scholars' Library, Macmillan.) { Tintern Abbey, Ulysses, The Deserted Village, Eve of St. Agnes, Thyrsis.
2. "Golden Treasury" by Palgrave, (Oxford University Press), the following poems: Nos. 66, 71, 166, 169, 171, 173, 174, 179, 188, 193, 195, 208, 210, 211, 212, 213, 222, 227, 240, 241, 244, 245, 250, 253, 255, 261, 275, 278, 324, 325, 333, 341, 349, 368, 369, 372, 379, 382, 389, 393, 404, 413, and 422.

**B.A. Honours.**

*(For the Examinations of 1952 and after)*

There will be *five* papers as follows, in addition to the examination in General English:—

*Paper I.—Chaucer and Elizabethan Literature:*

Chaucer:	Prologue to the Canterbury Tales.
Spenser:	*Epithalamion.
„	Faerie Queene, Book 1.
Marlowe:	*Faustus (1604 Text.)
Shakespeare:	Henry IV, Part I.
„	Julius Cæsar.
„	*Twelfth Night.
„	*Othello.
Jonson:	Everyman in His Humour.

\*Only those books marked with an asterisk are prescribed for detailed study.



Oxford Book of English Verse: Nos. 56, 58, 64, 65, 68, 69, 70, 71, 79, 94, 113, (VII), 117, 123—140, 146, 147, 153, 156, 160, 162, 168, 176, 184, 185, and 186.

*Paper II.—Poetry:* Milton—Collins:

Milton: L'Allegro, IL'Penseroso.

„ \*Lycidas.

„ \*Paradise Lost, Books 1 and 2.

Dryden: Absalom and Achitophel.

„ Alexander's Feast.

Pope: \*The Rape of the Lock.

Johnson: The Vanity of Human Wishes.

Goldsmith: The Deserted Village.

„ Retaliation.

Gray: \*Elegy.

„ The Progress of Poesy.

„ The Bard.

Collins: Ode on Popular Superstitions.

„ Ode to Evening.

Oxford Book of English Verse: Poems by Herbert, Milton, Marvell, Vaughan, Prior.

*Paper III.—Prose:* Browne—Sheridan:

Swift: Gulliver's Travels.

Browne: \*Religio Medici.

Addison: \*Selections (Lobban).

Fielding: Joseph Andrews.

Johnson: \*Lives of the Poets (Ed. Arnold—Milton, Pope, Addison, Swift).

Sterne: A Sentimental Journey.

Goldsmith: The Vicar of Wakefield.

Sheridan: The School for Scandal.

\*Only those books marked with an asterisk are prescribed for detailed study.



*Paper IV.—Poetry: Cowper—Swinburne:*

(1) The English Parnassus: \*Wordsworth,

\*Coleridge, Byron, \*Shelley, Keats.

\*Tennyson, Browning, \*Arnold.

(2) The Oxford Book of English Verse:

\*Wordsworth, Scott, \*Byron, \*Shelley, \*Keats,  
Tennyson.

\*Browning, Arnold, Morris, Swinburne.

*Paper V.—Prose: Scott—Hardy:*

Scott: The Antiquary.

Lamb: \*Essays of Elia (1st Series).

Jane Austen: Pride and Prejudice.

Hazlitt: \*Essays (Selected: Sampson).

Macaulay: Life of Milton.

Thackeray: Henry Esmond.

Dickens: Great Expectations.

Newman: \*Literary Selections (Longmans,  
pp. 1-175).

Hardy: The Return of the Native.

**M.A. Part I.***Books recommended for preliminary reading:*Hudson: Introduction to the Study of Literature  
(Harrap).Legouis: A short History of English Literature  
(Oxford).

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\*Only those books marked with an asterisk are prescribed for detailed study.



L. R. M. Brander: Rhetoric and Prosody, (Oxford University Press).

Scott-James: The Making of Literature.

Candidates are required to take the following *four* papers:—

*Paper I.—Elizabethan Dramatists:*

Marlowe: \*Edward II.

Shakespeare: \*The Tempest.

„ \*Antony and Cleopatra.

„ Richard II.

Johnson: Every Man in his Humour.

Webster: The Duchess of Malfi.

The paper shall be set in two parts: at least one half of the questions to be answered shall be on Shakespeare.

*Paper II.—English Poetry up to 19th Century: The English Parnassus:*

\*Chaucer (Prologue Only), \*Spenser, \*Dryden,  
\*Pope (Rape of the Lock only), \*Johnson, \*Goldsmith, \*Gray.

\*Milton: Paradise Lost, Books I and II.

*Paper III.—English Prose up to the 19th Century:*

\*Bacon: Essays (1597).

\*Browne: Religio Medici.

\*Addison: Selections (Lobban).

Fielding: Joseph Andrews.

Congreve: The Way of the World.

Sheridan: The School for Scandal.

Johnson: Life of Milton.

\*Only those books marked with an asterisk are prescribed for detailed study.



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*Paper IV.--19th Century Prose*

Austen: *Pride and Prejudice*.

\*Lamb: *Essays of Elia* (1st series).

Thackeray: *Henry Esmond*.

Dickens: *David Copperfield*.

\*Arnold: *Essays in Criticism* (2nd Series).

\*Macaulay: *Essay on Addison*.

Hardy: *The Return of the Native*.

**M.A. Part II.**

*Paper V.—19th Century Poetry:*

(1) *The English Parnassus*: \*Wordsworth, \*Coleridge, Byron, \*Shelley, \*Keats, \*Tennyson, \*Browning, \*Arnold.

(2) *Oxford Book of English Verse*: \*Wordsworth, \*Byron, Shelley, \*Keats, Tennyson, \*Browning, \*Arnold, \*Morris, and \*Swinburne.

*Paper VI.—Criticism:*

*English Critical Essays, 16th, 17th and 18th Centuries* (World's Classics).

*English Critical Essays, 19th Century* (World's Classics).

(Sidney, Jonson, Milton, Dryden, Pope, Addison, Johnson, Wordsworth, Coleridge, Lamb, Shelley, Hazlitt, Arnold, Pater.)

*Twentieth Century Critical Essays* (World's Classics).

Aristotle: *Poetics*, Translation, Bywater, (Oxford).

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\*Only those books marked with an asterisk are prescribed for detailed study.



*Books recommended:*

(1) *For reading.*

Saintsbury:	A History of English Criticism.
I.A. Richards:	Principles of Criticism.
„	Science and Poetry.
„	Practical Criticism.
T. S. Eliot:	The Sacred Wood.
T. S. Eliot:	The Use of Poetry and the Use of Criticism.
Herbert Read:	English Prose Style.
Bonamy Dobree:	Modern Prose Style.

(2) *For reference:*

Saintsbury:	A History of Criticism and Literary Taste in Europe.
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*Paper VII.—The History of English Literature:*

*Books recommended:*

(1) *For reading.*

Compton—Rickett:	A History of English Literature.
Sampson:	A Concise Cambridge History of English Literature.
Legouis and Cazamian:	A History of English Literature.

(2) *For reference.*

Cambridge History of English Literature.

Harvey: Oxford Companion to English Literature.

Introductions to English Literature (Edited by Bonamy Dobree).



Successful candidates shall be placed in three divisions, both in Theory and Practical examination separately as under:—

*First* division, candidates obtaining 60 per cent or more of the aggregate marks.

*Second* division, candidates obtaining not less than 48 per cent and not more than 59 per cent of the aggregate marks.

*Third* division, candidates obtaining not less than 36 per cent and not more than 47 per cent of the aggregate marks.

Special subject—*one paper* .... 100 marks.

Practical Test — .... 100 marks.

Minimum pass marks in Practical and Theory separately .... 50 per cent.

*Time allowed for each written Paper—3 hours.*

### M. Ed.

Five Papers, or a thesis in lieu of Paper V, each .... 100 marks.

Practical Test .... 100 marks.

*Time allowed for each Paper—3 hours.*

Minimum pass marks in the aggregate of Written Papers .... 40 per cent.

Minimum pass marks in Practical Test....40 per cent.

<i>First</i> division	60 per cent	} of the aggregate marks.
<i>Second</i> division	50 per cent	
<i>Third</i> division	40 per cent	



**C—COURSES OF STUDY.****ENGLISH.****B.A. Pass.**

There will be *five* papers as follows:—

**A.—GENERAL SECTION.**

*(For the Examinations of 1952 and after)*

*Paper I.*—The paper will consist of short essays of a general nature on the subject-matter of the books prescribed and also of other exercises in composition.

*Books prescribed (for general study):*

1. Dent: Modern Short Stories.

Or

One Act Plays of To-day: (Fourth Series)  
(Harrap).

2. Hardy: Far from the Madding Crowd.
3. Quiller-Couch: The Art of Writing.
4. Eve Curie: Life of Madame Curie (Pocket Books, New York).

Or

Mason: Readings from the Scientists (Macmillan).

*Paper II.*—An essay on a general subject. A large field of choice will be given. The subjects will be so varied as to have a bearing on the different courses, and some of the alternative essays will relate to Indian life and thought.

**B.—SPECIAL SECTION.**

*(For the Examinations of 1952 and after)*

*Paper I—Prose:*

1. Strachey: Queen Victoria.
2. Newbolt: Essays and Essayists: From Steele to Chesterton (Nelson).



*Paper II.—Drama:*

1. Shakespeare: A Midsummer Night's Dream.
2. Shakespeare: Othello.
3. Shaw: Candida.

*Paper III.—Poetry:*

1. Longer Poems, Old and New (selected by Cairncross, Scholars' Library, Macmillan.) { Tintern Abbey, Ulysses, The Deserted Village, Eve of St. Agnes, Thyrsis.
2. "Golden Treasury" by Palgrave, (Oxford University Press), the following poems: Nos. 66, 71, 166, 169, 171, 173, 174, 179, 188, 193, 195, 208, 210, 211, 212, 213, 222, 227, 240, 241, 244, 245, 250, 253, 255, 261, 275, 278, 324, 325, 333, 341, 349, 368, 369, 372, 379, 382, 389, 393, 404, 413, and 422.

**B.A. Honours.**

(For the Examinations of 1952 and after)

There will be *five* papers as follows, in addition to the examination in General English:—

*Paper I.—Chaucer and Elizabethan Literature:*

Chaucer:	Prologue to the Canterbury Tales.
Spenser:	*Epithalamion.
„	Faerie Queene, Book 1.
Marlowe:	*Faustus (1604 Text.)
Shakespeare:	Henry IV, Part I.
„	Julius Cæsar.
„	*Twelfth Night.
„	*Othello.
Jonson:	Everyman in His Humour.

\*Only those books marked with an asterisk are prescribed for detailed study.



Oxford Book of English Verse: Nos. 56, 58, 64, 65, 68, 69, 70, 71, 79, 94, 113, (VII), 117, 123—140, 146, 147, 153, 156, 160, 162, 168, 176, 184, 185, and 186.

*Paper II.—Poetry:* Milton—Collins:

Milton:	L'Allegro, IL'Penseroso.
„	*Lycidas.
„	*Paradise Lost, Books 1 and 2.
Dryden:	Absalom and Achitophel.
„	Alexander's Feast.
Pope:	*The Rape of the Lock.
Johnson:	The Vanity of Human Wishes.
Goldsmith:	The Deserted Village.
„	Retaliation.
Gray:	*Elegy.
„	The Progress of Poesy.
„	The Bard.
Collins:	Ode on Popular Superstitions.
„	Ode to Evening.

Oxford Book of English Verse: Poems by Herbert, Milton, Marvell, Vaughan, Prior.

*Paper III.—Prose:* Browne—Sheridan:

Swift:	Gulliver's Travels.
Browne:	*Religio Medici.
Addison:	*Selections (Lobban).
Fielding:	Joseph Andrews.
Johnson:	*Lives of the Poets (Ed. Arnold— Milton, Pope, Addison, Swift).
Sterne:	A Sentimental Journey.
Goldsmith:	The Vicar of Wakefield.
Sheridan:	The School for Scandal.

\*Only those books marked with an asterisk are prescribed for detailed study.



*Paper IV.—Poetry: Cowper—Swinburne:*

(1) The English Parnassus: \*Wordsworth,  
\*Coleridge, Byron, \*Shelley, Keats.

\*Tennyson, Browning, \*Arnold.

(2) The Oxford Book of English Verse:

\*Wordsworth, Scott, \*Byron, \*Shelley, \*Keats,  
Tennyson.

\*Browning, Arnold, Morris, Swinburne.

*Paper V.—Prose: Scott—Hardy:*

Scott: The Antiquary.

Lamb: \*Essays of Elia (1st Series).

Jane Austen: Pride and Prejudice.

Hazlitt: \*Essays (Selected: Sampson).

Macaulay: Life of Milton.

Thackeray: Henry Esmond.

Dickens: Great Expectations.

Newman: \*Literary Selections (Longmans,  
pp. 1-175).

Hardy: The Return of the Native.

**M.A. Part I.***Books recommended for preliminary reading:*

Hudson: Introduction to the Study of Literature  
(Harrap).

Legouis: A short History of English Literature  
(Oxford).

\*Only those books marked with an asterisk are prescribed for  
detailed study.



L. R. M. Brander: Rhetoric and Prosody, (Oxford University Press).

Scott-James: The Making of Literature.

Candidates are required to take the following *four* papers:—

*Paper I.—Elizabethan Dramatists:*

Marlowe: \*Edward II.

Shakespeare: \*The Tempest.

„ \*Antony and Cleopatra.

„ Richard II.

Johnson: Every Man in his Humour.

Webster: The Duchess of Malfi.

The paper shall be set in two parts: at least one half of the questions to be answered shall be on Shakespeare.

*Paper II.—English Poetry up to 19th Century: The English Parnassus:*

\*Chaucer (Prologue Only), \*Spenser, \*Dryden,  
\*Pope (Rape of the Lock only), \*Johnson, \*Goldsmith, \*Gray.

\*Milton: Paradise Lost, Books I and II.

*Paper III.—English Prose up to the 19th Century:*

\*Bacon: Essays (1597).

\*Browne: Religio Medici.

\*Addison: Selections (Lobban).

Fielding: Joseph Andrews.

Congreve: The Way of the World.

Sheridan: The School for Scandal.

Johnson: Life of Milton.

\*Only those books marked with an asterisk are prescribed for detailed study.



*Paper IV.—19th Century Prose*

Austen: *Pride and Prejudice*.

\*Lamb: *Essays of Elia* (1st series).

Thackeray: *Henry Esmond*.

Dickens: *David Copperfield*.

\*Arnold: *Essays in Criticism* (2nd Series).

\*Macaulay: *Essay on Addison*.

Hardy: *The Return of the Native*.

**M.A. Part II.***Paper V.—19th Century Poetry:*

(1) *The English Parnassus*: \*Wordsworth, \*Coleridge, Byron, \*Shelley, \*Keats, \*Tennyson, \*Browning, \*Arnold.

(2) *Oxford Book of English Verse*: \*Wordsworth, \*Byron, Shelley, \*Keats, Tennyson, \*Browning, \*Arnold, \*Morris, and \*Swinburne.

*Paper VI.—Criticism:*

*English Critical Essays, 16th, 17th and 18th Centuries* (World's Classics).

*English Critical Essays, 19th Century* (World's Classics).

(Sidney, Jonson, Milton, Dryden, Pope, Addison, Johnson, Wordsworth, Coleridge, Lamb, Shelley, Hazlitt, Arnold, Pater.)

*Twentieth Century Critical Essays* (World's Classics).

Aristotle: *Poetics*, Translation, Bywater, (Oxford).

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\*Only those books marked with an asterisk are prescribed for detailed study.



*Books recommended:**(1) For reading.*

Saintsbury:	A History of English Criticism.
I.A. Richards:	Principles of Criticism.
„	Science and Poetry.
„	Practical Criticism.
T. S. Eliot:	The Sacred Wood.
T. S. Eliot:	The Use of Poetry and the Use of Criticism.
Herbert Read:	English Prose Style.
Bonamy Dobree:	Modern Prose Style.

*(2) For reference:*

Saintsbury:	A History of Criticism and Literary Taste in Europe.
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*Paper VII.—The History of English Literature:**Books recommended:**(1) For reading.*

Compton—Rickett:	A History of English Literature.
Sampson:	A Concise Cambridge History of English Literature.
Legouis and Cazamian:	A History of English Literature.

*(2) For reference.*

Cambridge History of English Literature.

Harvey: Oxford Companion to English Literature.

Introductions to English Literature (Edited by Bonamy Dobree).



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*Paper VIII.*—An essay on a literary subject.

Or

Thesis.

**M.A.**

There will be *four* papers as follows:—

*Paper I.*—An Essay on a Literary subject (Same as Paper VII for M.A. Part II).

*Paper II.*—Criticism (Same as Paper VI for M.A. Part II).

*Paper III.*—The History of English Poetry from Spenser to the present day, with a special study of the following poets:—

Spenser, Milton, Pope, Gray, Byron, Morris, Hardy.

*Paper IV.*—The History of English Prose from Bacon to the present day, with a special study of the following authors:—

Bacon, Bunyan, Addison, Johnson, Carlyle, Galsworthy.

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## PHILOSOPHY.

### B.A. Pass.

*(For the Examinations of 1952 and after)*

#### *Paper I.—Psychology.\**

(a) The scope and methods of Psychology. Sensations: their varieties and their physical basis. Heredity and environment. Perception: Space, Time, Movement. Illusion. Attention. Discrimination, Weber-Fechner Law. Imagery. Memory and Association. Feelings and emotions. Learning: its various forms, laws of learning. Work and Fatigue. Intelligence and intelligence tests; Amentia. Thinking. Personality: Its development and disintegration: measurement of personality.

(b) The concept of the Unconscious. The complex. The phenomena and Mechanism of Neurosis. Day-dreaming. Delusion. Dementia. Dissociation. Dreams and Hallucinations.

(c) Experiments: Touch spots, Aesthesiometry, Campimetry, Binocular vision, Learning, Practice, Fatigue, Image-type, Memory and Displacement under Attention.

#### *Books prescribed:*

Murphy: Introduction to Psychology, 1951.

Hart: Psychology of Insanity.

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\*For B.A. Preliminary Examination of 1952 and after from (a) up to the end of emotions. From (c) Touch Spots, Aesthesiometry, Campimetry, Binocular Vision, Memory and Image Type.



*Books recommended :*

Boring, Langfeld and Weld: Psychology—(A factual text book).

Boring, Langfeld and Weld: A Manual of Psychological Experiments.

Fraser Harris: A. B. C. of Nerves.

G. Murphy: General Psychology (Briefer Course).

Collins and Drever: Laboratory Guide.

*Paper II.*—Social and Moral Philosophy.\*

(I) *Social Philosophy.*

The Problem of Social Philosophy; the Social Character of the Good. The Nature of Society; The Social Purpose. Democracy and its competitors; Force and Non-Violence; Social Institutions, their kinds and their ethical significance. The family; The State; The theory of Punishment; International relations; Religion; Social Virtues; Justice and Benevolence. Social Progress.

(II) *Moral Philosophy.*

The nature and Problems of Ethics: The object, intention, motive, consequence.

Ethics of commonsense; Intuitionism and its Recent Development, Authoritarianism; Rigorism;

End theories in Ethics—Psychological and Ethical Hedonism; Evolutionism; Rational Utilitarianism; Idealism; Virtue; Moral Progress.

*Books prescribed :*

Mackenzie: Outlines of Social Philosophy.

Muirhead: Elements of Ethics.

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\*For B.A. Preliminary Examination of 1952 and after: Social Philosophy.



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*Books recommended:*

Mackenzie: Manual of Ethics.

Ford: Social Problems and Social Policy, pp. 1-50.

Dewey and Tufts: Ethics.

Barret: Ethics.

Parker: Human Values.

Ginsberg: Moral Progress.

Beach, W. G.: The Growth of Social Thought.

*Paper III.—General Philosophy.\**

(i) The general problem of Philosophy. Philosophy and natural Sciences. Philosophy and Religion. Principal divisions of Philosophy.

Types of Epistemological Theory: Empiricism, Rationalism. Criticism. Intuitionism. Positivism.

Types of Metaphysical theory in broad outlines. Naturalism, Idealism, Pragmatism, Realism.

*Book prescribed:*

Hocking: W. E. Types of Philosophy, 1939 Edition (Omit Chapters 5, 11, 12, 14, 15, 25, 27, 28, 37 and 38).

*Books recommended:*

Calkins: Persistent Problems of Philosophy.

Thilly: History of Philosophy pp. 230—443.

Tomlin: Approach to Metaphysics.

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\*For B.A. Preliminary Examination of 1952 and after: The syllabus from the beginning to the end of Realism.



(ii) *Outlines of Indian Philosophy.*

General characteristics of Indian Philosophy.

The Buddhist System, its four principal schools.

Nyaya-Vaisheshika. The four Pramanas.

Sankhya—Yoga; Prakriti, its evolution; Purusha.

The Vedanta of Sankara; Relation to Upanishads; Sankara's criticism of Buddhism and the dualistic systems; Brahman; Maya, Atman; Moksha.

*Book prescribed:*

Hiriyanna: Essentials of Indian Philosophy.

*Book recommended:*

Chatterji and Dutta: Introduction to Indian Philosophy (Hindi Version).

**B.A. Honours.**

*(For the Examinations of 1952 and after)*

There will be *five* papers as follows:—

*Paper I.*—History of Philosophy:

Greek Philosophy.

Plato and Aristotle.

Transition to Modern Period.

Rationalism: Descartes to Leibnitz.

British Empiricism: Bacon, Hobbes, Locke, Berkeley  
Hume, Hartley and the Mills.

Critical and Post-Kantian Philosophy: Kant. Fichte  
Schelling. Hegel and Schopenhauer.

Philosophy of Evolution.



*Book prescribed:*

Thilly: A History of Philosophy.

*Books recommended:*

Cushman:

Vol. I.—A Beginner's History of Ancient Philosophy.

Vol. II.—A Beginner's History of Modern Philosophy.

Weber and Perry: History of Philosophy.

Stace: A Critical History of Greek Philosophy.

Windelband: History of Philosophy.

Russell: History of Western Philosophy.

*Paper II. Indian Metaphysics:*

Samkhya-Yoga.

Sankhya Karika with the commentary of Gaudapada (Colebrook's Translation).

Yoga-Sutra with the Vrtti of Bhoja.

*Books recommended:*

Das Gupta: Yoga Philosophy.

Rajendra Lal Mitra: Yoga-Sutra.

Woods: Yoga-Sutra (Harvard Oriental Series).

Garbe: Samkhya Philosophy.

*Paper III.—Advanced Ethics.**Books prescribed:*

Wundt: Ethics, Vol. I.

Broad: Five Types of Ethical Theory.

*Books recommended:*

Rashdall: Theory of Good and Evil.

Sidgwick: Methods of Ethics.



Spencer: Data of Ethics.

Huxley and Huxley: Evolution and Ethics.

*Paper IV.*—Logic and Scientific Method.

Nature and scope of the subject matter. Types of Logical study: Traditional, Metaphysical, Pragmatic and Mathematical Logic.

Laws of Thought—their metaphysical implications.

Terms and Concepts, Conceptualistic, Realistic and Nominalistic views.

Categories and Predicables—their critical estimate: Aristotle and Kant.

Significance and place of Definition along with Division and Classification.

Nature of judgment—its forms.

Syllogism—its principles, forms and types of reasoning.

Induction—its pre-suppositions.

The Law of Causation, methods of detecting causal relations.

Meaning and significance of Hypothesis.

The nature of Analogy.

Explanation and Laws of Nature.

The Doctrine of Probability and Scientific Truth.

Method in Historical Science, Mathematical Logic and Measurement.

*Books prescribed:*

Cohen and Nagel: Introduction to Logic and Scientific Method.



Stebbing: Modern Introduction to Logic, (Chapter VIII, IX, XIII, XIX, XX, XXIII, XXV).

*Books recommended:*

Bosanquet: Logic.

Reid: Knowledge and Truth.

Russell: Meaning and Truth.

Joseph: Introduction to Logic.

*Paper V.*—Psychology: General, Experimental and Abnormal.

(a) General—Introduction, Response mechanism, Physical dimensions of consciousness, Perceiving, Discrimination, Memory, Learning, Thinking, Feelings and emotions, Intelligence and Personality; Mental measurement.

(b) Schools—Structural, Behaviouristic, Psycho-analytical (Freud, Alder and Jung) Hormic and Gestalt.

(c) Abnormal—Normality, Functional disorders, effect of drugs, Suggestion and hypnosis, Dreams, Neurosis, Psycho-analytical and other theories.

(d) Experiments.

1. Verification of the Law of complementary colour mixture.

2. Verification of the Law of Non-complementary mixture.

3. Verification of the Law of Negative after images.

4. Determination of the latent time of after images.

5. Determination of the two point limen by the method of limits.

6. Determination of the two point limen by the Constant method.



7. Determination of the extent of illusion by the average error method.

8. To study the process of memorising by the learning method.

9. To study the process of memorising by the saving method.

10. To study the process of memorising by the method of paired associates.

11. To study the work curve phenomena.

12. Determination of the effect of distraction on breathing.

13. Determination of the effect of attention on breathing.

14. Determination of the natural reaction time.

15. Determination of the Sensorial reaction time.

16. Determination of the Muscular reaction time.

*Books prescribed:*

McDougall: Outlines of Abnormal Psychology.

Boring, Langfeld and Weld: Manual of Psychological Experiments.

Woodworth: Contemporary Schools of Psychology.

Woodworth: Experimental Psychology (Chapters 2, 7, 10, 11, 12, 14, 15, 17, 19, 22, 27 and 30).

*Books recommended:*

Hollingworth: Abnormal Psychology.

Fraser-Harris: A. B. C. of Nerves.

Bills: General Experimental Psychology.

Drever and Collins: Experimental Psychology.



Boring: Physical Dimensions of consciousness.

Guilford: Fields of Psychology.

Brown: Psycho-dynamics of Abnormal Behaviour.

Boring, Langfeld and Weld: Foundations of Psychology.

### **M.A. Part I.**

### **Philosophy.**

*(For the Examinations of 1952 and after)*

There will be *four* papers as follows:—

*Paper I.*—History of Philosophy:

(Same as Paper I in the Honours Course.)

*Paper II.*—Logic and Scientific Method.

(Same as Paper IV in Honours Course.)

*Paper III.*—Experimental Psychology:

*Books prescribed:*

Woodworth: Experimental Psychology.

Crafts, *et al*: Recent Experiments.

*Books recommended:*

Murphy: Historical Introduction to Modern Psychology.

Psychologies of 1925 and 1930 edited by Carl Murchison (Clark University Press).

Myers: Text-book of Experimental Psychology, Parts I and II.

Garrett: Great Experiments.

Guilford: Fields of Psychology.



*Paper IV.*—History of Indian Philosophy:

*Books recommended:*

Das Gupta: History of Indian Philosophy, Volume I.

Radhakrishnan: Indian Philosophy, Volumes I and II.

### **M.A. Part II.**

#### **Philosophy**

*(For the Examinations of 1952 and after)*

*Paper I.*—Contemporary Metaphysics:

Modern Idealism and Logical Positivism. Metaphysical implications of Modern Science, Critical Realism and General Acquaintance with certain important Modern Movements in Contemporary Philosophy such as Phenomenology. Philosophy of Organism and Existentialism.

*Books prescribed:*

Bradley: Appearance and Reality.

Holt and Others: New Realism (Selections).

Ayer: Language, Truth and Logic.

Sartre: Existentialism.

*Books recommended:*

Aliota: Idealistic Reaction against Science.

Sullivan: Limitation of Science.

Ruggiero: Existentialism.

Stebbing: Philosophy and the Physicist.

Waddington: Scientific Attitude.

Sellars: Essays in Critical Realism.

Whitehead: Science and the Modern World.

Metz: Hundred Years of British Philosophy.

„ Twentieth Century Philosophy.



*Paper II.—Abnormal and Social Psychology.*

*Abnormal Psychology:* The concept of normality. The General nature of functional disorders. The theories of hypnosis and suggestion. Freud and Jung on dreaming. Conflict, repression and complexes. The mechanism of repression, symbolization, regression, rationalization, etc. Theories of neurosis. Theory and structure of personality: Psychoanalytic and other approaches.

*Social Psychology:* Nature of individual and Social environment. Process of socialization. Measurement of institutional behaviour. Social forms of uniform behaviour. Taboos, rituals, stereotyped behaviour. Mechanism of social interaction. Custom, language, etc. The development and integration of personality. Theories of culture. Society and culture Social engineering.

*Experiments:*

A: 1. Determination of emotional maturity.

2. To study the free-association responses by the word list method.

3. To study personality by the Questionnaire method.

4. To study the method of assessing personality by projective technique (Rorschach Inkblots or T. A. T.)

B. Experiments in Social Psychology.

*Books prescribed:*

Brown: Psychodynamics of Abnormal Behaviour.

Brown: Psychology and Social Order.

Krech and Crutchfield: Theory and Problems of Social Psychology.



*Books recommended:*

McDougall: Outlines of Abnormal Psychology.

Dorcus and Shæffer: Abnormal Psychology.

Moss and Hunt: Foundations of Abnormal Psychology.

Bentley: Problem of Mental Disorder.

Nicole: Psychopathology.

Murphy: Abnormal Psychology.

Ginsberg: Psychology of Society.

Murphy and others: Experimental Social Psychology.

Katz and Schanck: Social Psychology.

Britt: Readings in Social Psychology.

La Pierre and Farnsworth: Social Psychology.

*Paper III.—Advanced Ethics:**A—Facts and Foundations of Ethics.*

Language and ethical ideas.

Myth and Magic.

Religion and Morality.

Tradition and Custom as a basis of moral ideas.

Tribe, Family and Group Life.

Law and Moral Ideal—Civilisation and Morality.

*B.—(1) Scope and Method of the Science and its relation to other Sciences.*

(2) Moral Judgment, its Implications and Development. Conduct, Desire, Wish, Will, Motive, Intention and Character.

(3) The Moral Laws, Casuistry, Virtue and their Unity, Duty and Conscience.



(4) Theories of the End: Hedonism, Rigorism and Idealism.

(5) Metaphysics of Ethics: The Chief Good—its Unity and Validity; Freedom and Responsibility; Morality; and religion.

*Books prescribed:*

Wundt: Ethics. Vol. I.

Green: Prolegomena to Ethics.

Sidgwick: Methods of Ethics.

*Books recommended:*

Rashdhal: Theory of Good and Evil, I and II.

Broad: Five Types of Ethical Theory.

Moore: Principia Ethica.

Spencer: Data of Ethics.

Popper, K. R.: Open Society and its Enemies.

*Paper IV.—*

(i) Special study of *one* of the following:

(a) Plato: The Republic.

(b) Kant: Critique of Pure Reason.

(c) Bergson: Two Sources of Morality and Religion.

(d) Freud: Introductory Lectures on Psycho-Analysis (Old and New).

Psychology of Everyday Life.

Totem and Taboo.

(e) Karl Marx: Capital.

(f) Sankara Bhashya: Brahmasutra.

(g) Whitehead: Process and Reality.

(h) Dewey: Logic—Theory of Inquiry.

(ii) Thesis.

*V.—Viva Voce.*



**M.A. Part I.****Psychology.**

*(For Examinations of 1952 and after)*

*Paper I.—Physiological and Comparative Psychology:*

(i) Scope of Physiological Psychology. Development of neural Mechanism; neuromuscular action; receptive, effector and adjustive processes. Structure and function of the nervous mechanism. Integrative function of the nervous mechanism at various levels. Equilibrium, competition, Dominance, facilitation and inhibition. Motivation, set, postures. Neurophysiology of learning. Fatigue and oscillation. Electro-physiology, psychogalvanic reflex-action potential and electro-encephalography. Psychophysiology and the problem of personality.

(ii) Development of modern Comparative Psychology. Biological and social foundations of Comparative Psychology. Problems and methods in Comparative Psychology.

Maturation and instinctive functions. Sensorimotor, perceptual and motor processes. Affective and imaginal processes. Discrimination. Memory and learning processes. Other higher mental functions including conceptual processes. Social behaviour. The problem of personality.

*Books prescribed:*

Freeman: Physiological Psychology.

Moss (Ed): Comparative Psychology.

*Books recommended:*

Morgan: Physiological Psychology. (Revised Ed.)

Herrick: Introduction to Neurology.



Schæfer: Experimental Physiology.

Greenwood: Physiology of the Special Senses.

Sherrington: Integrative action of the nervous system.

Murchison (Ed): Handbook of General Experimental Psychology, Part II.

Adrian: Basis of sensation.

Warden: Outlines of Comparative Psychology.

Katz: Animals and Men—Comparative Psychology.

Zuckerman: Functional Affinities of Man, Monkeys and Apes (Chapters X to XIII).

Zuckerman: The Social Life of Monkeys and Apes (Chapters I, II, XVIII, XIX).

Herrick: Brains of Rats and Men.

Washburn: Animal Mind—Text Book of Comparative Psychology.

*Paper II.*—Abnormal Psychology:

The Concept of normality. The general nature of functional disorders. The theories of hypnosis and suggestion. Freud and Jung on dreaming. Conflict, repression and complex. The mechanism of repression, symbolization, regression, rationalization, etc. Theories of neurosis. Theory and structure of personality. Psycho-analytic and other approaches.

Elementary Principles of Psychiatry and Psycho-analysis and Psycho-therapeutic methods.



*Books prescribed:*

Brown: Psychodynamics of Abnormal Behaviour.

Louitt: Clinical Psychology (revised edn.)

*Books recommended:*

Dorcus and Schæffer: Abnormal Psychology.

Moss and Hunt: Foundations of Abnormal Psychology.

Bentley: Problem of Mental Disorder.

Nicole: Psychopathology.

Murphy: Abnormal Psychology.

Cannon and Hayes: The Principles and Practice of Psychiatry.

Messerman: Principles of Dynamic Psychiatry.

Freud: Introductory lectures on Psycho-analysis.  
(Both series—New and Old).

*Paper III.—Experimental Psychology.**General Principles of Psychology.*

Psychological methodology. Sensory and perceptual processes, psychophysics and statistical method, learning, motivation and thought processes, affective and emotional processes, motor functions, action, methods of appraising personality. Experimental work comprising the following.

1. Verification of the Law of Complementary colour mixture.
2. Verification of the Law of Non-Complementary colour mixture.
3. Verification of the Law of Negative after images.
4. Determination of the latent time of after images.



5. Determination of the two point limen by the method of limits.
6. Determination of the two point limen by the Constant method.
7. Determination of the extent of illusion by the average error method.
8. To study the process of memorising by the learning method.
9. To study the process of memorising by the saving method.
10. To study the process of memorising by method of paired associates.
11. To study the work curve phenomena.
12. Determination of the natural reaction time.
13. Determination of the sensorial reaction time.
14. Determination of the Muscular reaction time.
15. Determination of the effect of distraction on breathing.
16. Determination on the effect of attention on breathing.

*Books prescribed:*

Crafts and others: Recent Experiments in Psychology.  
Woodworth: Experimental Psychology.

*Books recommended:*

Boring: Physical Dimensions of Consciousness.

Boring, Langfeld and Weld: Foundations of Psychology.

Boring, Langfeld and Weld: Manual.

Murchison: Handbook of General Experimental Psychology (Selections.)



Guilford: Psychometric methods.

Andrews, T. G. (Ed.): Methods in Psychology.

*Paper IV.*—History of Psychology:

Problems and methods in the History of Psychology. Speculative Psychology—a brief survey of the development of Psychology from Greek period to the 17th century; development of psychology in Cartesian thought, sensationalism early and later associationism; the impact of physical and biological sciences, evolutionism, Chemistry, Physical and mathematical sciences and medicine—Nineteenth century psychological developments: Empirical Psychology, Psychophysics—Wundt.

Structuralism, functionalism, behaviorism, reflexology, the development of medical psychology, Psychoanalytical schools, Hormic Psychology, Gestalt Psychology and its later developments—Topological and Vector Psychology.

*Books prescribed:*

Boring: History of Experimental Psychology, 1950.

Woodworth: Contemporary Schools.

*Books recommended:*

Murphy: Historical Introduction to Modern Psychology (Revised edition 1949).

Heidbreder: Seven Psychologies.

Woodworth: Contemporary Schools of Psychology. (Revised).

Pillsbury: History of Psychology.

Brett: History of Psychology Vols. I, II, III.

Murchison: Psychologies of 1925 and 1930.

Murchison: History of Psychology in Autobiography I, II.

Rand: Classical Psychologists.

Dennis: Readings in History of Psychology.



**M.A. Part II.****Psychology.**

*(For the Examinations of 1952 and after)*

*Paper I.—Advanced Educational Psychology:*

The nature of Educational Psychology. The Educational implications of, and factors influencing physical, motor, language, emotional, social and personality development, Intelligence. Individual Differences.

General Nature and Principles of Learning, Factors influencing learning. Appraisal of achievement. Transfer of training and its varieties.

*Books prescribed:*

Davis: Educational Psychology.

Vernon: Measurement of Abilities.

Hurlock: Child Development and Growth (1949).

*Books recommended:*

Sandiford: Foundations of Educational Psychology.

Pressey and Robinson: Psychology and the New Education.

Hollingworth: Educational Psychology.

*Paper II.—Social Psychology:*

Social Psychology: Methodology of Social Psychology: Phenotypic and Genotypic descriptions; class-theory and field-theory. Basic concepts of psycho-dynamics. Topological constructs. Nature of individual and of social environment. Process of socialization. Measurement of institutional behaviour. Social forms of uniform



behaviour. Taboos, rituals stereotyped behaviour. Mechanism of social Interaction. Custom, language, etc. The development and integration of personality. Theories of culture. Society and culture. Social engineering.

*Books prescribed:*

Krech and Crutchfield: Theory and Problems of Social Psychology.

Hartley and Newcomb: Readings in Social Psychology.

*Books recommended:*

Britt: Readings in Social Psychology.

Murphy and Others: Experimental Social Psychology.

Murchinson (Ed.): Handbook of Social Psychology.

Brown: Psychology and Social Order.

*Paper III.—Industrial and Vocational Psychology.*

*Industrial:*—Work, Fatigue, Environment, Incentives, Scientific Management, Personnel Problems, Advertisement. Attitudes, Morale.

*Vocational:*—Principles of Guidance, Aptitude, Testing, Selection, Job-analysis, Interview and Follow-up.

*Books prescribed:*

Myers: Principles and Techniques of Vocational Guidance.

Viteles: Industrial Psychology.

Poffenberger: Applied Psychology.

*Books recommended:*

Hull: Aptitude Testing.

May Smith: Industrial Psychology.

Moore: Psychology in Business and Industry.

Myers: Industrial Psychology in Great Britain.

Bingham: Aptitude and Aptitude Testing.



*Paper IV.*—Special study of *one* of the following:—

- (I) Behaviourism and Reflexology.
- (II) Psycho-analysis and Psychiatry.
- (III) Gestalt-theorie.
- (IV) Typology.
- (V) Criminal Psychology.
- (VI) Genetic and Child Psychology.
- (VII) Mental Testing.
- (VIII) Indian Psychology.
- (IX) Psychology of Personality.
- (X) Psychology of Religion

Or

Thesis

*Books recommended:*

- (1) Watson: Psychology from the standpoint of Behaviourist.  
Watson: Behaviourism.  
Bechterev: Reflexology.  
Pavlov: Conditioned Reflexes.  
Hull: Principles of Behaviour.
- (II) Freud: Introductory Lectures on Psycho-analysis.  
Freud: New Introductory Lectures on Psycho-analysis.  
Freud: Collected Papers Vol I.  
Brill (Ed.): Basic Works of Sig. Freud.  
Henderson and Gillespie: A Text-Book of Psychiatry.  
Zilboorg: History of Medical Psychology.



- (III) Kohler: Gestalt Psychology.  
Koffka: Principles of Gestalt Psychology.  
Peterman: Gestalt Psychology.
- (IV) Roback, A. A.: Psychology of Character.  
Jung, C. G.: Psychological Types.  
Spranger: Types of Men.  
Kretschmer: Physique and Character.  
Allers, R.: The Psychology of Character.
- (V) Mullins: Crime and Psychology.  
Reckless: Criminal Behaviour.  
Burt: The Young Delinquent.  
Hentig: Punishment, its origin, purpose and Psychology.
- (VI) Hurlock: Child Development.  
Murchinson (Ed.): Handbook of Child Psychology.  
Buhler: From Birth to Maturity.  
Hollingworth: Mental Growth and Decay.
- (VII) Mursell: Psychological Testing (Revised.)  
Sorenson: Statistics for Students of Psychology and Education.  
Terman and Merrill: Measuring Intelligence.  
Spearman: Abilities of Man.  
Guilford: Psychometric Methods.  
Cattell: A Guide to Mental Testing.  
Pintner: Intelligence Testing.  
Thomson: Factorial Analysis of Human Ability.  
Cronbach: Essentials of Psychological Testing.  
Garrett: Statistics.



(VIII) J. N. Sinha: Indian Psychology: Perception.

Rhys Davids: Buddhist Psychology.

Akhilanand: Hindu Psychology.

V. P. Pathak: The Heya Paksha of Yoga.

Samkhya Karika (17-37) Yoga Sutra.

Bharat Natyasastra (Ch. VI-VII).

Saxena, S. K.: Consciousness in Hindu Philosophy.

(IX) Allport: Personality.

Murphy: Personality.

Cattell: Dimensions of Personality.

McHunt: Personality and Behaviour Disorders.

(X) James: Varieties of Religious Experience.

Uren: Recent Religious Psychology.

Behanan: Yoga.

Rhine: Extra sensory perception.

Coster: Yoga and Psycho-analysis.

V.—Practical Work and *Viva Voce*.

*Experiments and Tests:*

1. Determination of Choice Reaction time.
2. Determination of Discrimination Re-action time.
3. To study the relative efficiency of different rates of work.
4. To study the Kohler effect.
5. To study the conditions of apparant movement.
6. Determination of the Memory and Attentional value of advertisement.
7. To study the P. G. R.
8. To study the method of measuring adult intelligence by verbal test.



9. To study the method of measuring adult intelligence by performance test.

10. To study the method of measuring intelligence of children by performance test.

11. To study the method of measuring intelligence by Binet Simon test.

12. To study the method of measuring intelligence by Culture free test.

13. To study the method of measuring intelligence by Non-language mental test.

14. Determination of the (i) mechanical aptitude and (ii) clerical aptitude.

15. Determination of the mechanical ability.

16. Determination of the vocational interest.

17. Some experiments in Social Psychology.

18. To study the free-association responses by the word list method.

19. To study personality by the Questionnaire method.

20. To study the method of assessing personality by projective technique (Rorschach Inkblot test or T. A. T.)

## **M.A. II.**

### **Indian Philosophy.**

*(For the Examinations of 1952 and after)*

*Paper I.—The Lokāyata, Jain and Buddhist System.*

*Books recommended:*

Dakshinaranjan Shastry: Short History of Indian Materialism.

Umāswāti: Tattvanthadhigama Sutra.

Law, B. C.: Life and Teaching of Mahavira.

Kimura: The original and developed doctrines of Indian Buddhism.



*Paper II.*—Nyāyā—Vaisesika and Mimāmsa.

*Books recommended:*

Sidhānta Mukṭāvali of Vishwanatha Swāmi Masha-  
vānanda (Ramkrishnan Mission).

Purva Mimansa.

Chatterjee S. C.: Nyaya Theory of Knowledge.

Keith: Indian Logic and Atomism.

*Paper III.*—Sāṅkhya Yoga and Vedānta.

*Books recommended:*

Vedānta Paribhāṣha tr. Mādhavānand (Ramakrishna)  
Mission).

Sankhya Karika: With Vachaspati-Misra's com-  
mentary.

Yogasutra with Vritt of Bhoja.

Shankara Bhasya—First Four Sutras of Bramha  
Sutra.

*Paper IV.*—Special Study.

Nāgārjuna. Dharmakirti, Sankara, Rāmānuja  
Madhava.

*Or*

Thesis.

*V.—Viva Voce*

**M.A.**

**Philosophy.**

(For the Examinations of 1952 and after)

*Paper I.*—(Same as Paper I in M.A. Part II Philosophy).

*Paper II.*—(Same as Paper II in M.A. Part II Philo-  
sophy).



*Paper III.—*

## (I) Philosophy of Religion.

*Books prescribed:*

Caird: An Introduction to the Philosophy of Religion.

James: Varieties of Religious Experience.

Otto: The Idea of the Holy.

*Books recommended:*

Needham, Balfour and Others: Science, Religion and Reality.

Hoffding: Philosophy of Religion.

Galloway: Philosophy of Religion.

Pratt: Religious Consciousness.

## (II) Philosophy of Education.

*Books prescribed:*

Hardie: Truth and Fallacy in Educational Theory.

Adams: Evolution of Educational Theory.

Boyd: History of Western Education.

*Books recommended:*

Russell: On Education—Education and Social Order.

Whitehead: The Aims of Education.

Isaacs: The Children We Teach.

Curry: The School (XXth Century Library).

*Paper IV:* (Same as Paper IV in M.A. Part II Philosophy).

*Paper V:* (Same as Paper V in M.A. Part II Philosophy).  
**M.A.**

**(Psychology)**

(Same as M.A. Part II Psychology).



## EDUCATION.

### B.A.

*(For the Examinations of 1952 and after)*

*Paper I.*—Principles of Education:

#### Syllabus:

Meaning of Philosophy and Education, and their relation to each other.

Aims of Education-Social and Individual and their synthesis.

Problems of Philosophy and their basis in Education.

Some Tendencies in Education, such (a) Naturalism in Education (b) Idealism in Education, (c) Pragmatism in Education (d) Religion in Education.

Disciplinary Conception of Education. The Curriculum  
*Books prescribed:*

Ross: Groundwork of Educational Theory.

Rusk: Great Educators, Chapter I, VI to XII.

*Books recommended:*

Boyd: History of Western Education (Selection).

Rusk: Philosophical Bases of Education.

*Paper II.*—Educational Psychology with Experimental work).

Nature and scope of Educational Psychology, methods. Heredity and Environment. Motivation. Sensory and perceptual processes. Attention, Factors of Advantage Learning, nature, laws-general factors on which learning depends-transfer of training. Memory. Imagery, types, imagination, its development. Work and Fatigue, causes of fatigue, incentives to work. Intelligence, nature, measurement. Personality.



*Books prescribed:*

Collins and Drever: Experimental Psychology.

Peterson: Educational Psychology (1948).

*Books recommended:*

Eurich and Carroll: Educational Psychology.

Gates and others: Educational Psychology.

Hollingworth: Educational Psychology.

*Experiments and Tests:*

(a) Experiments: Memory (Nonsense syllables, and figures, meaningful material, geometrical patterns).

Learning (Code-learning, maze-learning or mirror drawing).

Practice (Psycho-physical task; mental tasks.)

Fatigue (Mental and Muscular fatigue).

Image (Determination of Image-type.)

(b) Tests: Achievement Tests for High School.

Intelligence Tests: Binet-Simon and Performance Tests.

Aptitude Tests: Mechanical, etc.

Personality Tests: Introversion-Extroversion, Pressey-X-O.

*Paper III:* Educational Organisation—Indian and Western:

*Syllabus:*

Definition and scope of Comparative Education. Factors affecting the growth and development of educational organization. Natural factors such as Racial,



Linguistic, Geographic and Economic. Religious influences, Secular factors, such as Humanism, Socialism, Nationalism and Democracy.

Evolution of Educational Organization, Britain, U. S. S. R., U. S. A., India; France and Germany in outline.

(a) *Indian:*

*Book prescribed:*

Naik and Nurulla: History of Modern Indian Education.

*Book recommended:*

Mayhew: Indian Education.

(b) *Western:*

*Book prescribed:*

Hans: Comparative Education.

*Books recommended:*

Narendra Deva Committee Report.

Wood and Abbott Report.

Sargent Report.

Beatrice King: Russia goes to School.

Report of the University Commission (Radha Krishnan Report).

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**LICENTIATE IN TEACHING (L. T.)**  
**COURSES OF STUDY.**

The subjects of the Examination are the *Theory and Practice in Teaching*.

A.—*Theory*.

There will be *four* compulsory papers and *one* optional paper as follows:—

1. Educational and Experimental Psychology.
2. History of Education.
3. Principles and Methods of Education.
4. School Management and Hygiene.
5. (Optional) for candidates offering a Special subject.

*Paper I.—Educational and Experimental Psychology:*  
*Section A.*

1. Relationship between Psychology and Education.
2. Nature and Scope of Educational and Experimental Psychology.
3. Organism in relation to environment:—
  - (a) Response Mechanism.
  - (b) Different levels of action.
  - (c) Heredity and Environment.
4. The Psychological nature and development of the following mental phenomena:—
  - (a) Sensory Processes.
  - (b) Percepts and Concepts.
  - (c) Natural Tendencies.



- (d) Attention.
- (e) Learning.
- (f) Conditional Reflexes.
- (g) Habit.
- (h) Memory.
- (i) Imagination.
- (j) Emotion.
- (k) Individual Difference.
- (l) Thinking and Reasoning.
- (m) Intelligence.
- (n) Personality and Character.

### *Section B.*

1. Statistical Methods in Education—Mean, Median, Mode, Mean variation, standard variation, Coefficient of Correlation.

2. *Experiments* (a) Determination of Colour Sensitivity and Auditory acuity. To determine the two point Limen. To determine the Curve of Memorising, Image Type Determination, Substitution and Practice.

Tests (b) Intelligence tests, Performance tests for Primary Classes, and Achievement Tests for Primary Classes.

### *Books prescribed:*

Gates and Others: Educational Psychology.

Woodworth: Psychology. A Study of Mental Life.  
(1940 Ed.).

### *Books recommended:*

Jersild, Arthur. T: Child Psychology.

Collins and Drever: Experimental Psychology.

Bolton: Everyday Psychology for Teachers.



Garrett: Statistics in Psychology and Education.

Menzel: Suggestions for the Use of New Type Tests.

Kamat: Measuring the Intelligence of Indian Children.

Symonds: Mental Hygiene of the School Child.

Thorpe: Personality and Life.

*Paper II.—History of Education:*

1. A study in outline of the educational theories of Plato, Aristotle, Comenius, Locke, Rousseau, Pestalozzi, Herbart, Froebel, Spencer, Dewey: Modern Tendencies in Educational Theory.

2. Brief Survey of History of Indian Education.

3. History of the Development of Educational Organisations in India from 1815 with special reference to U. P.

*Books prescribed:*

Munro: A Brief Course in the History of Education.

Keay: Indian Education in Ancient and Later Times.

Nurullah and Naik: History of Education in India.

*Books recommended:*

S. S. Rao: A History of Education in India.

Dewey. J: The School and Society.

Varkey: The Wardha Scheme of Education.

Recommendations of the Central Advisory Board of Education, Government of India, 1944.

Quick: Essays on Educational Reformers.

Massenger: An Interpretative History of Education.

Altekar: Ancient Indian Education.

Radha Kumud Moorkerji: Ancient Indian Education.



Mulhern: History of Education 1946 (McGraw Hill).

H. G. Good: A History of Western Education (Macmillan, New York, 1947).

Butt: History of Education.

*Paper III.—Principles of Education and Methods of Teaching:*

*A.—Principles of Education.*

1. The meaning, aims and major present deeds of Education.
2. Functions of the School.
3. Principles of determining the curriculum.
4. Correlation of subjects.
5. Correction of pupils' note book and written work.
6. Questions and answers.

*B.—Methods of Teaching.*

I. General Methods:—

- (a) The teachers' preparation.
- (b) Notes of lessons.
- (c) Types of lessons-inductive, deductive, exposition, appreciation, drill, Socialized lesson, review, problem, audio visual lessons.
- (d) Use of black-boards.
- (e) Teaching how to study.
- (f) Different types of examinations.



2. Methods and apparatus of teaching the various subjects of the curriculum of the secondary schools in India.

3. Specialized Methods:—

(a) Kindergarten Method.

(b) Montessori Method.

(c) Dalton Method.

(d) Project Method.

(e) Decroly Method.

(f) Basic Method.

(g) The Activity School Method.

(h) Nursery School Method.

*Books prescribed:*

Thorndike and Gates: Elementary Principles of Education.

Earhart: Types of Teaching.

Kilpatrick: Foundations of Child study.

*Books recommended:*

Ryburn: Suggestions for the Teaching of English in India.

Pincet: Principles of Teaching.

James: Handbook of Suggestions for Teachers.

Nunn: Education, its Data and Principles.

Macnee: Suggestions for the Teaching of Geography.

Ghate: Suggestions for the Teaching of History in India.

Johnson: The Teaching of History.

Adams: The New Teaching.

Charters: Teaching the Common Branches.



Macnee: Instruction in Secondary Schools.

Montessori: Montessori System.

Dewey: The Dalton Laboratory Plan.

Parkhurst, H.: Dalton Plan.

Godfrey and Siddons: Teaching of Mathematics.

*Paper IV.—School Management and School Health:*

*A.—School Management.*

The School building including hostel and out-houses; Study of standard designs; Furniture and fitting; Apparatus.

The Headmaster and his duties; The Staff; Distribution of work; The class teachers and the specialist; Staff meeting; Classification of pupils; The curriculum; Time Tables; Correlations of subjects, Examinations; Marks; Promotion; Home work; School Libraries.

Class management; Discipline within and without the class-rooms; Moral training; Rewards and Punishment; Corporate life; Pupil self-Government; Hostel life and Superintendence; Parental co-operation; Office and School records.

*B.—Hygiene and School Health.*

(1) Value of knowledge of hygiene to the teacher. Importance of health of the teacher in relation to the welfare of the students.

(2) Study in outline the physiology and anatomy of the human body, structure, function and care of the eyes, ear, nose, throat and teeth.



(3) Personal hygiene and cleanliness; factors influencing health and growth-nutrition, balanced diet, school meal service at midday; healthy habits, postures, exercises, fatigue and rest; organized games.

(4) Hygiene and sanitation of the school and hostel; lighting and ventilation, water supply; common diseases; first aid-simple accidents and minor ailments and their treatment. Object and method of medical inspection. The health of the community.

*C.—Mental Hygiene.*

(1) General mental hygiene.

(2) Problems of maladjusted children.

*Books prescribed:*

Ryburn: Suggestions for the Organisation of Schools in India.

Bread: Class-room Management.

Stead, H. G.: Modern School Organisation.

Avery: School Hygiene.

Lester: School Hygiene.

*Books recommended:*

Williams: Personal Hygiene Applied.

Bennett: School Efficiency.

McCarrison: Food.

The Education Code of the Province.

First Aid—St. John's Ambulance.

Klin: Mental Hygiene.

Morgan: Psychology of Maladjusted School Child.

*Paper V.—(Optional).*

(For candidates offering a Special subject)



### *Special Course.*

In addition to the ordinary course, students are encouraged to specialise in the Methods of Teaching the subjects of the High School Curriculum as well as other special features of Educational work. In all of special subjects practical as well as theoretical work is required according to the requirements of Ordinance No. 7.

The subjects recognised for specialisation are:—

(a) Methods of teaching—

Hindi.	English.
Urdu.	Art and Craft.
Mathematics.	General Science.
History.	Nursery School.
Geography.	Physical Education.

(b) Special Features of Educational Work:

1. Mental Testing.
2. Educational Guidance.
3. Mental deficiency.
4. Retardation, temporary and permanent.
5. Neurosis among School children.
6. Library Science.
7. Vocational Guidance.

### *B.—Practice in Teaching.*

(a) In the Practice in Teaching every candidate must deliver *at least sixty* supervised lessons. Students must do some teaching in at least *three* of the subjects of the High School Curriculum, two of which must be his main subjects.



(b) They must teach *twelve* supervised lessons in the specialised subject in addition to sixty lessons required in (a) except those who offer separately should do twenty.

(c) They must obtain fifty per cent marks in both the written and practical examinations in the specialised subject.

### *C.—Observation.*

Students will be required to observe at least *ten* lessons as arranged by the supervisors.

### *D.—Criticism Lesson.*

Students will be required to do at least *one* criticism lesson.

### **Special Course in Hindi.**

Lectures on the principles and Methods of teaching Hindi language and literature.

(1) Aims of teaching the Hindi language, contrast with the aims in teaching English and classical language in India.

(2) Method of teaching Nagri to beginners. Montessori method of teaching, reading and writing. The synthetic and analytic methods of teaching reading. Principles of Nagri Pronunciation.

(3) Means of securing good handwriting. Formation of letters and the need for symmetry—kind of pens to be used. Paleographic and phonetic study of Devanagiri.

(4) Text-book—principles guiding the preparation of supplementary readers at various stages.



(5) The aims and variation in methods of teaching prose and poetry at different stages.

(6) Recitation exercises—the value of such exercises. Various method of committing passages to memory. Promotion of competitive and social activities through recitation.

(7) The teaching of grammar—its value at different stages—method of teaching grammar. Scheme in the teaching of grammar. Principles of classification adopted in different books on grammar. Hindi syntax.

(8) Organisation of Nagri composition, Procedure of teaching at various stages, composition through pictures story reproduction, letterwriting, paraphrasing, writing out explanations and salient points, rules of punctuation, etc. style and its application.

(9) Correlation in the teaching of the mother-tongue, with other subjects—History, Geography, Nature-study, English, etc.

(10) Development of literary application. The Vyas method as a teaching device in the understanding and appreciation of literature. The teaching of Alankars and Rasa.

(11) Private reading and library organisation—the nature of books and directions for use at various stages—school magazines and newspapers, the value of hand-written magazines.

(12) Study of Hindi Dialect.

(13) Twelve supervised lessons must be delivered.

*Notes 1.*—Students offering special course in Hindi are expected to have a sound knowledge of Hindi literature and its literary History.



(2) They are also expected to have acquaintance with Hindi literature for children (Juvenile Lit.) at various stages of mental development, and to prepare a list of books which they would recommend for reading at different stages.

(3) Six Essays on method chosen by the students in consultation with the lecturer-in-charge embodying the result of their study and experience.

(4) Models of Nagri composition to suit different classes as suggested by the teacher-in-charge.

*Books recommended:*

Rajendra Singh Gaur: Nibandha-Kala.

Ram Chandra Varma: Hindi Prayoga.

Ramchandra Varma: Achhi Hindi.

Kamta Prasad Guru: Sankshipta Hindi Vyakara-  
rana.

Dr. Shyam Sunder Das: Sahityalochona.

Indra Narain Avasthi: Bhasha Shiksha-vidhana.

Sita Ram Chaturvedi: Bhasha Ki Shiksha.

Ballard: Teaching of the Mother-tongue.

Ryburn: Teaching of the Mother-tongue.

**Special Course in Urdu.**

**I.—Principles and Method.**

**1. Aims**

Discussion of Aims of teaching Urdu language and literature.

Compare and contrast with aims of teaching classical languages, Hindi, English and other European Languages.



## 2. Stages.

Aims and methods for beginners and middle and High School stages according to modern methods.

## 3. Branches.

(a) Grammar—its value—its methods at different stages. Correlation with Hindi Prose and English Grammar at higher stages.

(b) *Composition*—‘Object’ composition, picture composition and abstract thinking. Arrangement of material and method of presentation.

(c) Poetry, prose and Pronunciation.

(d) Translation.

(e) Handwriting: elements of calligraphy with bearings on practice.

II.—Appreciation of Literature: Principles of criticism and literary taste. An outline of the History of Urdu Literature; Comparative study of English and Urdu on the one hand and Urdu and any one of the Indian literature (specially Hindi) on the other.

III.—Language and Allied Matters—Question of Philology, script, etc.

4. Twelve supervised lessons must be delivered.

*Books recommended:*

Ryburn: Teaching of Mother-tongue (Indian language) in India.

Ballard: Teaching of Mother-tongue.

Hudson: Introduction to the Study of Literature.

Richards: Principles of Criticism.

Richards: Practical Criticism.



6. R. B. Saxena: History of Urdu Literature.

7. Zor: Hindustani Lassaniat.

ہندوستانی لسانیات

8. Vikar Azim: Insha ki Talim.

انشا تعلیم

9. Salamat Ullah: Ham Kaisey Parhen.

ہم کیسے پڑھیں

10. Syed Abdul Hakim: Tadrissi Tarika.

تدریسی طریقہ

11. Fakhrul Hasan: Tarika Talim Urdu.

طریقہ تعلیم اردو

12. Fakhrul Hasan: Anparh Hindustan.

انپڑھا ہندوستان

### Special Course in Mathematics.

1. Place of Mathematics in the School Curriculum.

2. Correlation among the various branches and with other school subjects.

3. Basic consideration and schemes of Syllabus for the different sections of the school.

4. Methods of teaching of subjects and topics included in the Mathematics syllabus for classes upto the intermediate stage.

5. Consideration of courses in Practical Mathematics.

6. Practical utility of Mathematics and its value as a training.



7. History of development of Elementary Mathematics—particularly Arithmetic, Algebra and Geometry with special reference to the teaching of these subjects and syllabus for a class of beginners.

8. The Utility of the History of Teaching Mathematics.

9. Some important mathematicians and their contributions.

10. Twelve supervised lessons must be delivered.

*Books recommended:*

Godfrey and Siddons: The Teaching of Mathematics.

J. W. A. Young: The Teaching of Mathematics.

F. W. Westaway: Craftsmanship in the Teaching of Elementary Mathematics.

Schultze: The Teaching of Mathematics in Secondary Schools.

Durell: The Teaching of Elementary Algebra.

F. F. Potter: The Teaching Arithmetic.

J. B. Thomson: The Art of Teaching of Arithmetic.

Special Reports on Educational Subjects: Mathematic, Volume XXVI, Board of Education, England.

Report prepared by the Mathematical Association: The Teaching of Geometry in School.

Report on the Teaching of Arithmetic in Elementary Schools of London County Council—1906-1908.

D. E. Smith: History of Elementary Mathematics, Vols. I and II.

Datta and Singh: History of Hindu Mathematics, Vols. I and II.

Bell: Men of Mathematics.



### Special Course in History.

I.—The development of the subject. The value of historical study.

The History Syllabus. Aims of Teaching. Principles of selection and arrangement and selection of material for various stages. Outline schemes of work. Internationalism and the school Teaching of History.

Method at different stages (General).

(a) Teacher's work. Characteristic and importance of oral teaching.

(b) Pupil's work.

The History Text-Book with a critical study of existing text-books, Making the Past real. The History Room. The use of sources (limitations and possibilities in Indian Schools). The Teaching of Chronology. Local history and excursions. The use of the Library. The Teaching of Civics. Correlation with other subjects. Modern Developments and the Teaching of History in Schools. Examination in History.

II.—Detailed study of one or two periods of Indian History for training in collection and adaptation of material for teaching purposes.

III.—Practical work. Maps, sketches, Chronological charts and diagrams. Plans. Models.

IV.—Local History work.

V. Twenty supervised lessons must be delivered.

*Books recommended:*

Drummond: History in School.

Firth: The Learning of History.

Jarvis: The Teaching of History. Publications of the Historical Association of England.

Walker: History Teaching for Today.

Johnson: The Teaching of History.



### **Special Course in Geography.**

**I.—Teaching of Geography—**Evolution of Geographical pedagogy and the modern conception of Geography. Value of the Subject and its place in the curriculum. Methods of teaching the subject to (i) Lower, (ii) middle and (iii) upper classes. Syllabus for each stage. Drawing up a detailed syllabus for a class. Notes of lessons. Aids to fact knowledge. Use of text-books. The Geography Rooms, Museum and Library. Geography of the Home Region. School excursion. Maps and how to teach them. Correlation of Geography with other subjects. Value of hand-work in the teaching of Geography.

**II.—General Geography—**(a) A general knowledge of the surface forms of the land, the movement of air and water and the distribution of plants, animals and men. A study of the influence of geographical conditions upon man in his economic social and political relation.

(b) A study of Eurasia on the regional basis.

**III.—Practical work—**(a) Record of weather observations.

(b) Exercises—Diagrams of land forms; exercises on latitude and longitude, distribution maps and sketches.

(c) Excursions.

(d) Practical training in the use of Projection lantern and slides.

(e) Models and Maps.

(f) Human Geography—Man as a geographical factor. Modes of life in typical regions.

**IV.—**Writing of essays and notes on important geographical subjects.

**V.—**Newspaper. Geography—Selected topics from the Geographical magazines and newspapers.



VI. —Twelve supervised lessons must be delivered.

*Books recommended:*

(a) Subject matter—

Unstead and Tailor: Essentials of World Geography.

D. Stamp: Regional Geographies of Asia and Europe.

C. J. Fox: Physical Geography for Indian Students.

Tarr and Vartom: College Phosiography.

(b) Methods of Teaching Geography.

Fairgrieve: Geography in School.

Oliver Garnett: Fundamentals in School Geography.

Vernard: Principles and practice of Geography Teaching.

Barker: Geography in Education and Citizenship.

Holtaz: Modern Teaching of Geography.

Finch: Modern Teaching of Geography.

Memorandum on the Teaching of Geography issued by the Incorporated Association of Assistant Masters.

Articles in Magazines and Journals.

### **Special Course in English.**

(1) Aims and objects of teaching English in India with special reference to the change in curriculum at present.

(2) Recognition of alphabets. Special requirements and methods in the lowest classes.

Characteristics of Direct method and Comparison with the Translation method.

(3) Training in oral expression and conversation lesson.



(4) Reading—Its value at the different stage—Principles underlying the choice of the reading material.

(i) Silent Reading—Its aims, advantages and disadvantages; how to make it effective; how to test comprehension and speed in silent reading.

(ii) Oral reading—Its aims, advantages and disadvantages, Essentials of oral reading. Why and where should it be stressed; Pronunciation—how to teach and to give practice.

Spelling—Ways and devices to overcome difficulties.

(5) Teaching how to write different scripts: Difference between a written and a printed page; use of writing material. Practice in writing-Transcript and different type of composition exercises; Unseen work-Aims and variety.

(6) Why dictate passages? Aims, advantages and disadvantages; Method of taking up dictation exercise.

(7) Translation—Its use and abuse; method.

The task of correcting various exercises.

(8) Teaching of Prose and Poetry-Test book; Requirements, and methods of teaching.

Rapid Readers and their necessity.

(9) Explaining meaning of words, phrases and idioms.

(10) Lessons in Grammar-Aims, defects of the old method; Different methods, Importance of Functional Grammar.

(11) Development of Literary appreciation. What it means; Its special place in the teaching of Poetry; How to lead the students to appreciate.

(12) Basic English—Its possibilities.



(13) Utility of Library and role of magazines.

*Note:* At least six essays to be written out of the above mentioned topics. Practice to be given in drawing up good lesson notes.

Selection of short suitable passages and an anthology of English verse for study by children at the various stages. Judgment of standard by teaching some of them in different classes.

*Books recommended:*

Thompson and Wyatt: The Teaching of English in India.

Fawcett: The teaching of English in the Far East.

Ryburn: Suggestions for the Teaching of English.

Champion: Lectures on Teaching of English in India.

### **Special Course in Nursery School Education.**

I.—History and Aims of Nursery School Education.

II.—Comparison and Contrast with Nurseries, Kindergartens, and Montessori Classes.

III.—Characteristics of Nursery School Child, Physical, Mental, Social, Emotional Development.

IV.—Nursery School Programme.

Physical Well-Being, Mental, Health, Intellectual and Aesthetic Interests, Social and Emotional Development.

V.—Equipment for a Nursery School.

VI.—Parent Education.



*Basic Texts.*

Updegraff—Pre-School Education.

Poster and Mattson—Nursery School Education.

*Supplementary Texts.*

Johnson—Children in the Nursery School.

Lucy Sprague Mithall—Here and Now Story book.

Essentials in Nursery Education—Publication of U. S. Government, Washington.

Susan Isaacs: The Nursery Year.

Blanche Weil: Seeing Through Children's Eyes.

Rhoda Bacmeister: Caring for the Run-about Child.

Blatz and Bott: Parents and the Pre-School Child.

Wolff: Personality of the Pre-School Child.

VII. Twelve supervised lessons must be delivered.

**Special Course in Physical Education.**

I.—History and development of Physical Education specifically in India.

II—Objects and aims of Physical Education—its place in the school, community and nation.

III.—Basic principles of health and first aid, including public health and sanitation; problems of community and social units as well as individual.

IV.—Coaching—rules and techniques of coaching team games, track and field work, necessary equipment and care of equipment.

V.—Recreational Leadership—games and activities of all age children, planning social events and play periods for children in schools, play-grounds, and other organisations.



*VI—Practical Work.—*

The managing of the games' programme held on the college campus. Planning and managing recreation preferably playground work in the city or a village community.

Twelve supervised periods of Leadership in an actual teaching situation.

*Books recommended:*

Andrews, George F.: Physical Education in Indian Schools. (The Little Flower Co).

Bancroft, J. H. : Games for the Play-ground Home, School and Gymnasium. (The MacMillan Co., New York 1947).

Buck : Rules of Games and Sports. (Y.M.C.A. Publishing House, Calcutta, 1949-50).

Danielson, Andrew J.: Health and Physical Education for Schools in India. (Y.M. C. A. Publishing House Calcutta, 1934).

Harbin, E.C. : The Fun Encyclopædia. (Abingdon Cokesbury Press, New York, 1940).

Salzer, F. : Physical Exercises and Games for Girls. (Lucknow Publishing House, Lucknow, 1932).



### Special Course in Library Science.

I.—Aims and objects of Library Science.

II.—Special Library service:—

Classification, cataloguing and circulation of books.

Periodicals and references.

Exhibits.

III.—Library equipment.

IV.—*Practical Work*:—

(a) Observation of Libraries in the city. The University, the Public Library, Council House Library, and Libraries of educational institutions.

(b) Practical work in the special library services (stated in II) in any institution approved by the Department.

#### *Books recommended:*

##### *Texts.*

Akers, S. G.	.... Simple Library Cataloguing.
Grey, Duncan	.... Fundamentals of Librarianship.
Hutcalhens, Johnson & Williams.	Guide to the Use of Library.
Savage, E. A.	.... Manual of Book Classification and Display.

##### *Reference:*

Dewey, Melvil	.... Abridged Decimal Classification and Relative Index.
Dears, M. E.	.... List of subjects for small Libra- ries.



**MASTER IN EDUCATION. (M. Ed.)**

*(For the Examinations of 1952 and after)*

*Paper I—Philosophy of Education:*

Aims; Philosophy of Education in relation to Social sciences; Idealism, Humanism, Realism, Naturalism, Pragmatism; Education and the Social Order; the State and Education; Intergration in Education; Education and Religion.

*Books recommended:*

Adams: Evolution of Educational Theory.

Kandel: Conflicting Theories of Education.

Horne: Philosophy of Education, Idealism in Education.

Whitehead: Aims of Education.

Dewey: Democracy and Education.

Hardie: Truth and Fallacy in Educational Theory.

Bode: Modern Educational Theories.

Brubacher: Modern Philosophies of Education.

Brubacher: A History of the Problems of Education.

Hook: Education for Modern Man.

*Paper II.*—The nature of Educational Psychology. The Educational implications of and factors influencing physical, motor, language emotional and social development. General nature of and principles of learning. Factors influencing learning. Transfer of training and its varieties.

Statistical methods in their application to education and principle forms of educational measurement. Their value and critique. Varieties of mental tests and their



special technique. Measurement of individual differences.  
Personality testing.

*Books recommended:*

Davis: Educational Psychology.

Vernon: Measurement of Abilities.

Hurlock: Child Development and Growth.

Pressey and Robinson: Psychology and the New Education.

Cattell: A guide to Mental Testing.

Garrett: Statistics in Psychology and Education.

*Paper III.—Comparative Education:*

The purpose of this paper is to make a comparative study of the present Educational systems in India, United Kingdom, U. S. S. R., U. S. A., France, Germany, China and Mexico, with special reference to (a) Aims, (b) Organisation, (c) Finance Methods and (d) their distinctive features.

*Books recommended:*

Kandel: Comparative Education.

Sandiford: Educational systems.

Beatrice King: Russia goes to School.

Roman: New Education in Europe.

Strayer and Thorndike: Educational Administration.

Educational Year Books published in England, India and U. S. A.

Hans: Comparative Education.



*Paper IV.*—Abnormal Psychology as applied to Education with special reference to the following:—

Backward children, temporary and durable retardation, mental deficiency, Moral amentia, pathological traits in school children, neurosis in school children. The blind and the deaf mutes.

Causes and methods of treatment. Educational methods for the subnormal group.

*Books recommended:*

Tredgold: Mental Deficiency.

Duncan: Mental Deficiency.

Shuttleworth and Potts: Mentally deficient children.

Hollingworth: Special Talents and Defects.

Gray: Nation's Intelligence.

Cattell: Fight for our nation's Intelligence.

Bonner: Psychology of special abilities and disabilities.

Inskip: Teaching of Dull and Retarded children.

Burt: The Backward child.

McDougall: Outlines of Abnormal Psychology.

Hollingworth: Psychology of Sub-normal Children.

Burt: The Young Delinquent.

Moss and Hunt: Foundations of Abnormal Psychology.

Binet: Intelligence of the Feeble minded.

Goddard: Feeble-mindedness.

*Paper V.*—One of the following options or thesis:

(I) Vocational Guidance and Selection.

(II) Education in India.



*Vocational Guidance Syllabus:*

Its Nature and purpose, Varieties of Guidance, Distinction between vocational guidance and selection; Need for Vocational Guidance; Its origin and development, Basic Assumptions, Value and Critique of different Methods in Guidance, The School and its relation to Vocational Guidance.

The services in a Vocational Guidance Programme; Study of Occupations and occupational Information; Self-Inventory; Data Collecting about the Individual, Physical, Medical, Intelligence, rating, special Aptitudes, Interests, Personality traits, etc., counselling; Interview, preparatory Service, placement, Follow-up or adjustment.

*Books recommended:*

G. E. Myers : Principles and Techniques of Vocational Guidance.

A. J. Jones : Principles of Guidance.

Keller and Viteles : Vocational Guidance Throughout the World.

Earle : Methods of Choosing Career.

Bingham : Aptitude and Aptitude Testing.

Hollingworth : Vocational Psychology and Character Analysis.

Macrae : Talents and Temperaments.

Oakely and Macrae : Handbook of Vocational Guidance.

I. L. O. Report on Vocational Guidance.

Kaplan : Encyclopædia of Vocational Guidance, 2 Vols.

*VI. Practical Work:—*

A—Experiments:

Two point Limen—By method of Limits.



Time Estimation empty intervals—Method of reproduction (Short or Long).

Binocular vision—Stereoscopy.

4. Image type—(1) Kraepelin's Method.

(2) Smith's Method.

5. Fatigue—Ergography.

6. Learning Curve—(1) Non-sense syllables.

(2) Non-sense Geometrical figures.

7. Memory Curve—Non-sense syllables (Learning and Savings method).

8. Fluctuation of Attention—(With Masson's Disc).

9. Diagnostic Association—Kent Rosanoff List.

10. Visual Motor co-ordination:

(1) Card sorting.

(2) Form Board.

B.—Tests: Intelligence Tests (for secondary classes), Performance Tests (for secondary classes), Achievement Tests (English, Mathematics, languages), Reading Tests, Spelling Tests and Tests of ability (professional and academic).

*Books recommended:*

Titchener: Experimental Psychology, Vols. I and II.

Myers: Text Book of Experimental Psychology, Vols. I. and II.

Collins and Drever: Experimental Psychology.

Whipple; Manual of Physical and Mental Tests, Vols, I and II.

Woodworth: Experimental Psychology.

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## HISTORY.

### B.A. Pass.

*(For the Examinations of 1952 and after)*

There will be *three* papers as follows:—

*Paper I—Indian History (circ. 2500 B. C.—1000 A. D.)*

*Books prescribed:—*

V. Rangacharya: History of Pre-Mussalman India, Vol. I, (Pre-Historic India).

R. D. Banerjee: Pre-historic and Ancient India.

N. N. Ghosh: Early History of India (3rd Edition).

V. A. Smith: Early History of India (4th Edition).

R. S. Tripathi: History of Ancient India.

E. J. Rapson: Ancient India.

*Paper II—Indian History (from 1000 A. D. to the Present Day).*

*Books recommended:*

Majumdar, Ray Choudhri and Dutta: Advanced History of India (Macmillan).

Ishwari Prasad: History of Mediæval India.

Thompson and Garratt: Rise and Fulfilment of British Rule in India.

Dodwell: Short History of India.

Sarkar: India Through the Ages.

*Paper III—Western History from 1500.*

*Books prescribed:*

Schevill: A History of Europe from the Reformation to the Present Day.



Muir, R.: Short History of the British Commonwealth.

Ketelbey, D. M.: History of Modern Times.

Fisher, H. A. L.: History of Europe.

Hayes: A Political and Cultural History of Modern Europe.

Bossenbrook: Development of Contemporary Civilisation.

**B. A. Honours and M.A. (M.A. Parts I and II).**

Candidates will be required to take *one* of the following Branches:—

1. *Branch I.*

Ancient Indian History and Archæology (Group A).

*Or*

Ancient Indian History and Culture (Group B).

2. *Branch II.*

Modern Indian History.

3. *Branch III.*

Western History.

**BRANCH I.**

**B. A. Honours.**

*(For the Examinations of 1952 and after)*

**ANCIENT INDIAN HISTORY AND ARCHÆOLOGY  
(GROUP A)**

There will be *five* papers as follows:—

*Paper I.—Early History of India up to 800 A.D.*

*Books recommended:*

Smith, V. A.: Early History of India (4th Edition).



Dubreuil, J. : Ancient History of the Deccan.

Ray Chaudhri, H. C. : Political History of Ancient India, Pt. II, (5th Edition).

Banerjee, R. D. : Age of the Imperial Guptas.

*Paper II.—History of a Special Period—Ancient India from B.C. 600 to 269.*

*Books recommended :*

Ray Chaudhri, H. C. : Political History of Ancient India, Pt. II. (5th Edition),

Rhys Davids, T. W. : Buddhist India (Chaps. I—VI).

McCrindle, J. W. : Ancient India as described by Megasthenes and Arrian.

Law, B. C. : India as described in Early Jaina and Buddhist Texts.

Bhandarkar, D. R. : Charnichael Lectures on the Ancient History of India (Calcutta University).

Mookerji, R. K. : Chandragupta Maurya and His Times.

Law, B. C. : Tribes in Ancient India (Bhandarkar Oriental Series).

Cambridge History of India, Vol. I. (Chaps. XIV—XIX).

*Paper III—Asoka* (with a study of his inscriptions in the original but not their linguistic or philological aspects).

*A.—Sources :*

*Books prescribed :*

Hultzsch, E. : *Corpus Inscriptionum Indicarum*, Vol. I.

Turner, R. L. : Govimath and Palkigundu Inscriptions of Asoka.



*Books recommended:*

Geiger, W.: *Mahāvamsa* (P. T. S. Translation Series), Chaps. V and XII—XX.

Oldenberg, H.: *Dīpavamsa* (Translation) Chaps. VI—VIII and XII—XVI.

Cowell and Neil: *Divyavadana*, pp. 369—434.

Watters, T.: On Yuan Chwang.

Legge, J.: Fa-Hien.

*B.—General:**Books recommended:*

Bhandarkar, D. R.: Carmichael Lectures on Asoka. (Calcutta University), (2nd Edition).

Mookerji, R. K.: Asoka (Gaekwad Lectures).

Smith, V. A.: Asoka, (3rd Edition).

Barua, B. M.: Asoka and His Inscriptions.

Barua, B. M.: Inscriptions of Asoka, Pt. II (Calcutta University).

*Paper IV.—Archæology, Part I (General).**Books recommended:*

Woolley, Sir Leonard: Digging up the Past.

Petrie, W. M. F.: Methods and Aims in Archæology.

Kenyon, F. G.: How to Observe in Archæology.

Boulton, W. H.: Romance of Archæology.

Marshall, Sir John.: Conservation Manual.

Sana Ullah, M.: Notes on the Preservation of Antiquities in the Field (Ancient India, Vol. I).



*For reference only:*

Reports of the Archæological Survey of India on the excavations at the following sites:—

Lauriya Nandangarh, Rajgir, Nalanda, Kumrahar and Bulandibagh, Sarnath, Taxila, Besnagar, and Sanchi.

*Either.*

*Paper V—Archæology, Part II (a) (Prehistoric Archæology and Physical Anthropology).*

SECTION A—(Prehistoric Archæology).

Burkitt, M. C.: Prehistory, a Study of Early Cultures in Europe and the Mediterranean Basin.

De Morgan, J.: Prehistoric Man, General Outline of Prehistory.

De, Tarra, H. and Patterson, T. T.: Studies on the Ice Age in India and Associated Human Cultures.

Mitra, P.: Prehistoric India.

Garrod, G.: Environments, Tools and Man.

SECTION B—(Physical Anthropology).

Krochar, A. L.: Anthropology.

Osborn: Men of the Old Stone Age.

Keane, A. K.: Men, Past and Present.

Haddon, A. C.: Wanderings of Peoples.

Stibbe: Physical Anthropology.

*Or*

*Paper V—Archæology Part II (b) (Ancient Indian Architecture, Sculpture and Painting).*



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*Books recommended:*

Smith, V. A.: History of Fine Art in India and Ceylon.

Coomaraswamy, A. K.: History of Indian and Indonesian Art.

Kramrisch, Stella: Indian Sculpture.

*For reference only:*

Grunwedel: Buddhist Art.

Brown, P.: Indian Architecture, Vol. I.

Havell, E. B.: Handbook of Indian Art.

Havell, E. B.: Indian Sculpture and Painting.

Ray, N. R.: Maurya and Sunga Art.

Brown, P.: Indian Painting.

Khandelwal, Karl: Studies in Early Indian Sculpture and Painting.

Kramrisch, Stella: A Survey of Painting in the Deccan.

Vogel, J. Ph.: Buddhist Art.

Acharyya, P. K.: Dictionary of Hindu Architecture.

Acharyya, P. K.: Manasara.

OR

ANCIENT INDIAN HISTORY AND CULTURE  
(GROUP B)

There will be *five* papers as follows:—

*Paper I—Early History of India up to 800 A. D.*

*Books recommended.*

(Same as in Group A.)



*Paper II—History of a Special Period—Ancient India  
from B. C. 600 to 269.*

*Books recommended:*

(Same as in Group A)

*Paper III.—Asoka.*

*Books prescribed and recommended:*

(Same as in Group A).

*Paper IV—Hindu Polity.*

*Books recommended:*

Jayaswal, K. P.: Hindu Polity.

Bandopadhyaya, N. C.: Development of Hindu Polity  
and Political Theories.

Mookerji, R. K.: Local Government in Ancient India.

Law, N. N.: Studies in Ancient Hindu Polity.

Bhandarkar, D. R.: Some Aspects of Ancient Hindu  
Polity.

Dikshitar, V. R. R.: Mauryan Polity.

Majumdar, R. C.: Corporate Life in Ancient India.

Ghoshal, U. N.: Hindu Political Theories.

*Paper V—Historical Geography of Ancient India.*

*Books recommended:*

Cunningham, Sir A.: Ancient Geography of India.

Fleet, J. F.: Topographical List of the *Brihat-Samhita*  
(Indian Antiquary 1893).

Pargiter, F. E.: *Markandeya Purana-Bhuvanakosha*  
(Translation.)



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McCrindle, J. W.: Ptolemy's Geography of India.

Schoff, W. H.: The Periplus of the Erythraean Sea.

Foucher, A.: Notes on the Ancient Geography of Gandhara.

Watters, T.: On Yuan Chwang.

Dey, N.: Geographical Dictionary of Ancient and Mediæval India.

Law, B. C.: Geography of Early Buddhism.

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### M. A. Part I.

*(For the Examinations of 1952 and after)*

#### ANCIENT INDIAN HISTORY AND ARCHÆOLOGY (GROUP A)

There will be *four* papers as follows:—

*Paper I—History of a Special Period—Ancient India  
from B. C. 600 to 269.*

(Same as Paper II of B. A. Honours.)

*Paper II.—Asoka* (With a study of his inscriptions in the original, but not their linguistic or philological aspects.)

(Same as Paper III of B. A. Honours.)

*Paper III—Archæology, Part I (General).*

(Same as Paper IV of B. A. Honours.)

*Paper IV.*

(Same as Paper V of B. A. Honours.)

OR

#### ANCIENT INDIAN HISTORY AND CULTURE (GROUP B)

There will be *four* papers as follows:—

*Paper I—History of a Special Period—Ancient India  
from B. C. 600 to 269.*

(Same as Paper II of B. A. Honours.)

*Paper II—Asoka.*

(Same as Paper III of B. A. Honours.)

*Paper III—Hindu Polity.*

(Same as Paper IV of B. A. Honours.)

*Paper IV Historical Geography of Ancient India.*

(Same as Paper V of B. A. Honours.)



## M.A. and M.A. Part II.

*(For the Examinations of 1952 and after)*ANCIENT INDIAN HISTORY AND ARCHÆOLOGY  
(GROUP A)

There will be *four* papers as follows and a *Viva Voce* Test:—

*Paper 1—History of a Special Period—Ancient India from A. D. 319 to 650.*

*Books recommended:*

A.—*Sources (in Translation):*

Fleet, J. F.: *Corpus Inscriptionum Indicarum*, Vol III  
Nos. 1-16, 18, 19, 20, 32, 33, 34, 36, 37, 42, 43,  
44, 45, 46, 47, 51, 52, 60 and 78.

Select Inscriptions as given below:

Nalanda Copper-Plate Inscription of Samudragupta.

Mathura Stone-Pillar Inscription of Chandragupta II.

Poona Copper-Plate Inscription of Prabhavati Gupta.

Basarh Seal Inscription of Govindgupta.

Karamdanda Inscription of Kumaragupta I.

Damodarpur Copper-Plate Inscriptions of Kumaragupta I.

Dhanaidaha Copper-Plate Inscription of Kumaragupta I.

Tumain Inscription of the year 116, G.E.

Nalanda Seal Inscription of Narasimhagupta.



Sarnath Inscription of the year 154, G.E.  
 Bhitari Seal Inscription of Kumaragupta II.  
 Nalanda Seal Inscription of Budhagupta.  
 Damodarpur Copper-Plate Inscriptions of Budha-  
 gupta.

Sarnath Inscription of the year 157, G.E.  
 Kura Inscription of Toramana Shaha.  
 Haraña Inscription of Isanavarman.  
 Banskhara Copper-Plate Inscription of Harsha.  
 Madhuban Copper-Plate Inscription of Harsha.  
 Nalanda Seal Inscription of Harsha.

Allan, J.: Gupta Coins. (British Museum Catalogue).

Brown, C. J.: Gupta and Maukhari Coins (Lucknow Museum Catalogue).

Thomas and Cowell: *Harshacharita* (Translation).

Watters, T.: On Yuan Chwang.

*B.—General:*

*Books recommended:*

Banerji, R. D.: Age of the Imperial Guptas.

Ray Chaudhuri, H. C.: Political History of Ancient India, Pt. II (5th Ed.)

Basak, R. G.: History of North-Eastern India.

Salatore, R. N.: Life in the Gupta Age.

National History of India, Vol. VI.

Mookerji, R. K.: Harsha.

Mookerji, R. K.: The Gupta Empire.

*Paper II—Archæology, Part III: Epigraphy.*

A.—Palæography of the Indian Scripts (up to A.D. 550).



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B.—EPIGRAPHY.

## I. Select Inscriptions up to A.D. 200 (in Translation).

Hathigumpha Inscription of Kharavela.

Mahasthan Fragmentary Stone-Plaque Inscription.

Piprawa Buddhist Vase Inscription.

Sohgaura Copper-Plate Inscription.

Besnagar Pillar Inscription of Heliodoros,

Swat Relic-Vase Inscription of the Meridarkh Theodoros.

Shinkot Steatite Casket Inscriptions of the time of Menander.

Ayodhya Stone Inscription of Dhanadeva.

Mathura Lion-Capital Inscriptions of the time of Ranjavula and Sodasa.

Mathura Votive-Tablet Inscription of the time of Sodasa.

Mathura Stone Inscription of the time of Sodasa.

Taxila Copper-Plate Inscription of Patika (Year 78).

Takht-i-Bahi Stone Inscription of Gondopharnes (Year 103).

Kalawan Cooper-Plate Inscription (Year 134).

Taxila Silver-Scroll Inscription (Year 136).

Sarnath Buddhist Inscription of Kanishka I (Year 3).

Sui Vihar Copper-Plate Inscription of Kanishka I (Year 2).

Sahet Mahet Buddhist Image Inscription of Kanishka I.

Manikiala Stone-Inscription of Kanishka I (Year 18).

Kurram Copper-Casket Inscription (Year 21).



Sanchi Buddhist Image Inscription of Vasishka (Year 28).

Mathura Inscription of Huvishka (Year 28).

Ara Stone-Inscription of Kanishka II (Year 41).

Wardak Bronze-Vase Inscription of Huvishka (Year 51).

Lucknow Museum Jain Inscription of Huvishka (Year 48).

Mathura Image Inscription of Vasudeva (Year 80).

Nasik Cave Inscriptions of the time of Nahapana (Years 41, 42, and 45).

Karle Cave Inscription of the time of Nahapana.

Nasik Cave Inscription of the time of Krishna.

Nanaghat Cave Inscription of Queen Naganika.

Nasik Cave Inscription of Gautamiputra Satakarni (Year 18).

Karle Cave Inscription of Vasishthiputra Pulumavi.

Nasik Cave Inscription of Vasisthiputra Pulumavi (Year 19).

Nasik Cave Inscription of Yajna Satakarni.

Andhau Stone Inscription of the time of Chashtana and Rudradaman.

Junagadh Rock-Inscription of Rudradaman I.

Gunda Stone Inscription of the time of Rudrasimha I.

II: Inscriptions of the Imperial Guptas up to A.D. 510 (in Translation).

*Paper III—Archæology, Part IV: Ancient Indian Numismatics.*

*Books recommended:*

Smith, V. A.: Catalogue of Coins in the Indian Museum, Calcutta, Vol. I.



- Whitehead, R. B.: Indo-Greek Coins, Punjab Museum Catalogue, Vol. I.
- Gardner, P.: Greek and Scythic Coins, British Museum Catalogue.
- Rapson, E. J.: Andhra Coins, British Museum Catalogue.
- Allen, J.: Gupta Coins, British Museum Catalogue.
- Rapson, E. J.: Indian Coins.
- Brown, C. J.: Coins of India.
- Bhandarkar D. R.: Carmichael Lectures on Ancient Indian Numismatics (Calcutta University).
- Chatterjee, C. D.: Numismatic Data in Pali Literature, Buddhistic Studies. Chap. XV.
- Whitehead, R. B.: Notes on Indo-Greek Numismatics (Numismatic) Chronicle, (1923).
- Chakraborty, S. K.: A Study of Ancient Numismatics.
- Allen, J.: Indian Coins (Ancient India) British Museum Catalogue.

*Paper IV.—Archæology, Part V: Ancient Indian Iconography.*

*Books recommended:*

- Rao, Gopinath: Elements of Hindu Iconography.
- Coomarswamy, A. K.: Elements of Buddhist Iconography.
- Bhandarkar, D. R.: Jaina Iconography (Indian Antiquary, Vol. XL).
- Banerjee, J. N.: Development of Hindu Iconography.
- Bhattacharya, B.: Indian Buddhist Iconography.
- Bhattacharya, B.: *Sadhanamala*.



Kramrisch, Stella: *Vishnudharmottaram*, Chap. III.

Bannerjee, J. N.: *Pratima-Lakshanam*.

Gangoly, O. C.: *South-Indian Bronzes*.

OR

## ANCIENT INDIAN HISTORY AND CULTURE (GROUP B)

There will be *four* papers as follows and a *Viva Voce* Test:

*Paper I—History of Special Period—Ancient India from A.D. 319 to 650.*

*Books recommended:* (Same as in Group A).

*Paper II—Prehistoric and Rigvedic Culture.*

*Books recommended:*

### A. Prehistoric Culture.

Marshall, Sir John: *Mohenjo-daro and the Indus Culture*.

Mackay E.: *Further Excavations at Mohenjo-daro*.

Vats, M. S.: *Excavations at Harappa*.

Mackay, E.: *Early Indus Civilizations*.

Piggott, S. *The Baluchistan Pottery and Sites* (*Antiquity*, XVII, December, 1943).

### B. Rigvedic Culture.

Kaegi, A.: *Rig-Veda*.

Winternitz, M.: *History of Indian Literature*, Vol. I (pp. 52—310).

Macdonell, A.: *Vedic Mythology*.

Childe, V. G.: *The Aryans*.

Das, A. C.: *Rigvedic Culture*.



*Paper III—Either (a) Social and Economic Life in Ancient India.*

*Books recommended:*

Kaegi, A.: Rig-Veda.

Rhys Davids, T. W.: Buddhist India.

Fick, R.: Social Organisation of the Time of the Buddha.

Mookerji, R. K.: Hindu Civilization.

Sarkar, S. C.: A Glimpse of Indian Society in the First Centuries, B. C. and A. D.

Chakladar, H. C.: Social Life in Ancient India.

Das, S. K.: Economic History of Ancient India.

Bose, A. K.: Social and Rural Economy in Northern India, Vols. I and II.

Banerji, N. C.: Economic Life and Progress in Ancient India.

Schoff, W. H.: The Periplus of the Erythræan Sea.

Kautilya: Arthasastra.

Or (b) *Ancient Indian Monuments*, in their historical bearings with reference to the following centres:—

Lauriya Nandangarh, Rajgir, Nalanda, Patna (Kumrahar and Bulandibagh) Sarnath (Banaras,) Mathura, Sanchi, Taxila Bharhut and Ajanta.

*Books recommended:*

(1) *Lauriya Nandangarh.*

Ann. Rep., Arch. Surv. of Ind., 1904-5; 1906 );  
Arch. Surv. of Ind.—Antiquities of Bihar and Orissa.



(2) *Rajgir.*

Ann. Rep., Arch. Surv. of Ind., 1905-6; 1913-14;  
Memoirs of the Arch. Surv. of India, No. 58;  
Arch. Surv. of Ind.—Antiquities of Bihar and  
Orissa.

(3) *Nalanda.*

Ann. Rep., Arch. Surv. of Ind., 1915-16; 1919-20;  
1920-21;

Memoirs of the Arch. Surv. of Ind. No. 61.

Arch. Surv. of Ind.—Antiquities of Bihar and  
Orissa.

(4) *Patna (Kumrahar and Bulandibagh).*

Ann. Rep., Arch. Surv. of Ind.—Eastern Circle.  
1912-13; 1913-14; 1914-15; 1915-16.

Ann. Rep., Arch. Surv. of Ind., 1912-13.

Arch. Surv. of Ind.—Antiquities of Bihar and  
Orissa.

(5) *Sarnath (Banaras).*

Ann. Rep. Arch. Surv. of Ind., 1904-5; 1906-7;  
1907-8; 1915.

Sahni, D. R.: Catalogue of the Museum of Archæ-  
ology at Sarnath.

(6) *Mathura.*

Vogel. I. Ph.: Catalogue of the Mathura Museum.

Agarwala, V. S.: Handbook of the Sculptures  
in the Curzon Museum of Archæology,  
Muttra.

Growse, F. S.: Mathura.



(7) *Sanchi.*

Ann. Rep., Arch. Surv. of Ind., 1913-14.

Chanda, R. P.: Catalogue of the Museum of Archaeology at Sanchi, Bhopal State.

(8) *Taxila.*

Ann. Rep. Arch. Surv. of Ind., 1902-34.

Memoirs of the Arch. Surv. of India No. 7.

Ancient India (Bulletin of the Arch. Surv. of Ind.)  
No. 4.

(9) *Bharhut.*

Cunningham, Sir A.: Stupa of Bharhut.

Barua, B. M.: Bharhut (3 Vols.)

(10) *Ajanta.*

Fergusson and Burgess: The Cave Temples of India.

Burgess, T.: Notes on the Bauddha Rock Temples of Ajanta (Arch. Surv. Western India, No. 9.)

Smith, V. A.: History of Fine Art in India and Ceylon.

*Paper IV—Essay or Thesis.*

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## BRANCH II.

## Modern Indian History.

## B. A. Honours.

(For the Examinations of 1952 and after)

*Paper I.—Mediæval India 1206-1556 A. D. (with special reference to the Social and Cultural History of the period).*

*Books recommended:*

- Cambridge History of India, Vol. III (omitting political history of Minor States).  
Tara Chand: Influence of Islam on Indian Culture.  
Carpenter: Theism in Mediæval India (relevant portion only.)  
Tripathi, R. P.: Some aspects of Muslim Administration.  
Ashraf, R.M.: Life and Conditions of the people of Hindustan.  
Ram Naresh Tripathi: Kavita-Kaumudi, Part I (relevant Historical portion only).  
Srivastava: The Sultanate of Delhi (relevant chapters).

*Paper II.—The Age of Akbar (Akbar to Shahjahan 1556-1658—with special emphasis on the Social and Cultural aspects of the period).*

*Books recommended:*

- Beveridge: Akbarnamah, Vol. III only.  
Blochmann and Jarret: Ain-i-Akbari (Regulations and Cultural portion only).



Smith V. A. : Akbar the Great Moghal.

Beni Prasad : Jahangir.

Saxena B. P. : History of Shahjahan.

Sarkar J. N. : Mughal Administration.

Sarkar J. N. : Studies in Mughal India.

Bernier : Travels in the Moghal Empire.

Payne C. H. : Akbar and the Jesuits.

Payne C. H. : Jahangir and the Jesuits.

Moreland : India at the death of Akbar.

O'Shea & Troyer : Dabistan ul-Mazahib (English Translation—relevant Religious aspects only).

Misra-bandhu : Misra-bandhu Vinode (Hindi), Vols. I and II, (relevant Historical portion only).

Gauri Shankar Ojah : Rajputana-ka Itihas (Hindi) : Vols. II and III (for the history of Mewar only.)

Qanungo : Dara Shukoh (omit chapters on Political History).

*Paper III—The Rise of Maratha Power (from Shiva-ji to Peshwa Balaji Baji Rao).*

*Books recommended :*

Grant Duff : History of the Marathas (relevant portion only) Vols. I and II.

Sardesai, G. A. : A New History of the Marathas, Vols. I and II.

Dighe : Peshwa Baji Rao I.

Ranade : Rise of the Marathas.



Sarkar, J. N.: Shivaji and his Times.

Sarkar, J. N.: Fall of the Mughal Empire, Vol. II.

Sen, S. N.: Administrative System of the Marathas. Military System of the Marathas.

*Paper IV.—Modern India: Constitutional History of British India, 1600-1858.*

*Books recommended:*

Keith: Speeches and Documents on Indian Policy  
Vol. I.

Keith: Indian Constitutional History.

Ilbert: The Government of India.

Cambridge History of India, Vol. V.

*Paper V.—Modern India in its Political, Constitutional, and Administrative aspects.*

*Books recommended:*

Mookerji: Indian Constitutional Documents.

Keith: Indian Constitutional History.

Cambridge History of India, Vol. VI.

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### M.A. Part I.

(For the Examinations of 1952 and after)

There will be *four* papers as follows:—

- Paper I*—(Same as Paper II of B. A. Honours, Branch II).  
*Paper II*—(Same as Paper III of B. A. Honours, Branch II).  
*Paper III*—(Same as Paper IV of B. A. Honours, Branch II).  
*Paper IV*—(Same as Paper V of B. A. Honours, Branch II).

### M.A. and M.A. Part II.

(For the Examinations of 1952 and after)

There will be *four* papers and also a *Viva Voce* Test:—

*Paper I*—*Essay or Thesis*.

*Paper II*—*Mediæval Indian Monuments (1000—1700 A. D.)* in their historical bearings with reference to the following centres:—

Agra, Delhi, Jaunpur, Chitor, Bijapur and Ahmedabad.

#### *Books recommended:*

Smith V. A.: *History of Fine Arts in India and Ceylon* (New Edition).

Havell, E. B.: *Mediæval Architecture of India From 100 A. D.*

Fergusson, J.: *History of India and Eastern Architecture, Vol. II* (Revised by Burgess).

Smith, E. W.: *Mughal Architecture of Fatehpur Sikri*.



Cousens: Bijapur and its Architectural Remains.

Percy Brown: Indian Architecture (Islamic-Period),  
Memoirs of the Archæological Survey of India,  
Nos. 10, 22, 49 and 52.

Cambridge History of India, Vol. III, pp. 668—97  
and 625—35.

Cambridge History of India, Vol. IV, pp. 523—68  
and 520—79.

*Paper III—Indian History from Clive to Wellesley.*

*Books recommended:*

Beveridge: History of British India.

Cambridge History of India, Vol. V.

Dodwell: Dupleix and Clive.

Sinha: Haidar Ali.

Chatterji: Mir Qasim.

Chatterji: Verelst's Rule in India.

Srivastava: Shuja-ud-Daula.

Jones: Warren Hastings.

Aspinall: Cornwallis in Bengal.

Roberts: India under Wellesley.

Mookerji: Indian Land System. (Bengal Govern-  
ment Publication).

*Paper IV—Indian History from Hastings to Dalhousie  
(1813—1856).*

*Books recommended:*

Cambridge History of India, Vol. V.

Beveridge: A Comprehensive History of India,  
Vol. III.



Mehta: Lord Hastings and the Indian States.  
Sinha: Ranjit Singh.

**BRANCH III.**  
**Western History.**  
**B.A. Honours.**

*(For the Examinations of 1952 and after)*

There will be *five* papers as follows:—

*Paper I.—Classical (Græco-Roman) Civilisations.*

*Books recommended:*

Rostovtzeff: A History of the Ancient World.

Todd: The Ancient World.

Turner: The Great Cultural Traditions.

Sandford: The Mediterranean World in Ancient Times.

Glover: Democracy in the Ancient World.

Davis: Readings in Ancient History.

Bury: History of Greece.

Botsford & Sihler: Hellenic Civilisation.

Hopkinson: Greek Leaders.

Frank: History of Rome.

Rostovtzeff: Social and Economic History of the Roman Empire.

Bailey: The Mind of Rome.

*Paper II.—The Age of the Renaissance and the Reformation.*

*Books recommended:*

Lucas: The Renaissance and the Reformation.



Battifol: The Century of the Renaissance.

Hollings: Europe in Renaissance and Reformation  
1453-1660.

Cambridge: Modern History, Vols. I and II.

Seeborn: The Protestant Revolution.

Smith: The Age of the Reformation.

Acton: Lectures on Modern History.

Lodge: Close of the Middle Ages.

Johnson: Europe in the Sixteenth Century.

Ogg: Europe in the Seventeenth Century.

Smith: A History of Modern Culture, Vol. I.

Randall: The Making of the Modern Mind.

*Paper III.—The Age of the French Revolution 1763-1814.*

*Books recommended:*

Reddaway: A History of Europe from 1715 to 1814.

Brunn: The Enlightened Despots.

Mowat: The Age of Reason.

Lowell: Eve of the French Revolution.

Gottschalk: The Era of the French Revolution.

Rose: Revolutionary and Napoleonic Era 1789-1815.

Thompson: The French Revolution.

Thompson: Leaders of the French Revolution.

Mathiez: The French Revolution.

Fisher: Studies in Napoleonic Statesmanship.

Mowat: The Diplomacy of Napoleon.

Brunn: Europe and the French Imperium.



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*Paper IV.—English History, in its Political, Constitutional  
Social and Economic aspects 1485-1714.*

*Books recommended:*

The Political History of England, Vols. V and VI.

The Oxford History of England, Vols. VII—X.

Innes: England under the Tudors.

Trevelyan: England under the Stuarts.

Stubbs: Lectures on Mediæval and Modern History.

Trevelyan: English Social History, Chapters IV-X.

Marriott: This Realm of England, Chapters XII-XVIII.

Adams: English Constitutional History, Chapters X-XV.

Keir: Constitutional History of Modern Britain, Chapters I—V.

Prothero: Statutes and Constitutional Documents (1559-1625).

Gardiner: Constitutional Documents of the Puritan Revolution.

*Paper V.—Middle and Far Eastern History since 1815.*

*Books recommended:—*

Gowen: A Short History of Asia.

Millard: Conflicts of Policy in Asia.

Townsend: European Colonial Expansion since 1871.

Latourette: A Short History of the Far East.

Rappoport: History of Palestine.

Foster: The Making of Modern Iraq.

Sykes: History of Persia.



McMunn: Afghanistan.

Popowski: The Rival Powers in Central Asia.

Mills: British Rule in Eastern Asia.

Thompson: French Indo-China.

Vandenbosch: The Dutch East Indies.

Morse: The International Relations of the Chinese Empire.

Kohn: Nationalism and Imperialism in the Hither East.

### M.A. Part I.

*(For the Examinations of 1952 and after)*

There will be *four* papers as follows:

*Paper I*—(Same as Paper II of B.A. Honours).

*Paper II*—(Same as Paper III of B.A. Honours).

*Paper III*—(Same as Paper IV of B.A. Honours).

*Paper IV*—(Same as Paper V of B.A. Honours).

### M.A. and M.A. Part II

*(For the Examinations of 1952 and after)*

There will be *four* papers and a *Viva Voce* Test:—

*Paper I*.—*Modern Political Thought (Machiavelli to Marx)*:

*Book recommended*:

Sabine: History of Political Theory.

Gettel: History of Political Thought.

Dunning: A History of Political Theories.

Coker: Recent Political Thought.



Merriam and Barnes: Political Theories.

Masters of Political Thought, Vols. II and III (Edited by Edward McChesney Sait).

Hearnshaw: The Social and Political Ideas of Some Great Thinkers of the Renaissance and the Reformation.

Hearnshaw: The Social and Political Ideas of Some Great Thinkers of the 16th and 17th Centuries.

*Paper II.—The Development of the Great European Nations 1815-1914.*

*Books recommended:*

Hazen: Europe Since 1815.

Feuter: World History 1815-1920.

Mowat: A History of European Diplomacy 1815-1914.

Lipson: Europe in the 19th Century.

Mowat: The Romantic Age.

May: The Age of Metternich.

Binkley: Realism and Nationalism 1852-1871.

Langer: European Alliances and Alignments 1871-1890.

Langer: The Diplomacy of Imperialism 1890-1905.

Sontag: European Diplomatic History 1871-1932.

Petrie: Diplomatic History.

Fay: The Origins of the World War, 2 Vols.

*Paper III.—History of the U. S. A. since 1763.*

*Books recommended:*

Morrison and Commager: The Growth of the American Republic.



Beard: American History.

Bemis: The Diplomatic History of the United States.

Agar: The American Presidents.

Birley: Speeches and Documents in American History Vols. I—III.

Faulkner: American Social and Political History.

Becker: The Eve of the Revolution.

Becker: The Declaration of Independence.

Jameson: The American Revolution Considered as a Social Movement.

Van Tyne: The Causes of the War of Independence.

*Paper IV.—Essay or Thesis.*



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HISTORY AND CULTURE OF ASIAN PEOPLES.

B. A. Pass.

*(For the Examinations of 1952 and after)*There will be *three* papers as follows:—*Paper I.—General Cultural History of the Orient.**Paper II.—General Cultural History of India upto 650 A. D.**Paper III.—Either.**Section A.—Indian Culture from 650 to 1200 A. D.**Section B.—Mediæval and Modern Indian Culture from 1200 A. D. to Modern Times.*

Or

*Section A.—Arab and Iranian Culture from the earliest times to 750 A. D.**Section B.—Arab and Iranian Culture from 750 A. D. to 1300 A. D.**Paper I.—General Cultural History of the Orient.*

The Course deals with:

1. Rise and Diffusion of Culture in Mesopotamia.
2. Indus Valley Civilization.
3. Vedic Civilization: Social and Political institutions and Philosophical trends.
4. The Culture and Philosophy of China.
5. The Rise of the Persian Empire.
6. Pre-Islamic Arab Culture and Civilization.
7. Rise and spread of Islam, Saracenic Civilizations: Development of Art, Architecture, Science and Philosophy.



8. Rise and Spread of Colonialism: European expansion and influences in South-East Asia.

*Books recommended:*

Mukerjee: Hindu Civilization.

Hogarth: Ancient East.

Turner: The Great Cultural Traditions.

Tsui Chi: A short History of the Chinese Civilization.

Saunders: The Pageant of Asia.

Steiger-Bayer-Benitez: A History of the Orient.

Latourette: A Short History of the Far East.

Ameer Ali: History of the Saracens.

Sykes: Persia.

Dikshit: Prehistoric Civilization of the Indus Valley.

*Paper II.—General Cultural History of India upto 650 A. D.*

The Course deals with:

1. Rise and Expansion of Buddhism and Jainism in the post-Vedic period.
2. The Social Background of the Epics.
3. Rise of the Imperial Dynasties Magadha.
4. Art and Literature in the Gupta Period.
5. The Social and Cultural Life in India in the days of Harsa.
6. The Birth of Classical Sanskrit and Derived Languages.
7. Origin and Growth of the six philosophical systems.



*Books recommended :*

Masson-Oursel : Ancient Indian Civilization.  
R. K. Mukerjee : Hindu Civilization.  
Barnett : Antiquities of India.  
Rapson : Ancient India.

*Paper III.—**SECTION A*

*Indian Culture from 650 A. D. to 1200 A. D.*

The Course deals with :

1. Social Background of the Pauranic and Smriti Period.
2. Art and Architecture-Ajanta and Ellora.
3. The growth of the later philosophical systems.

*Books recommended :*

Rawlinson : India—a cultural History.  
Garrett : The Legacy of India.  
Havell : Handbook of India Art.  
Valanvalkar, P. H. : Hindu Social Institutions.  
Hiriyanna : Essentials of Indian Philosophy.

*SECTION B.*

*Mediæval and Modern Indian Culture from 1200  
A. D. to Modern Times.*

The Course deals with :



1. India in transition during the 12th Century. A. D.
2. Contact of Hindu and Muslim Cultures under the Delhi Sultanate.
3. Beginnings of religious and cultural approachment of Indian peoples in the 15th Century.
4. The dawn of the new era of the growth of Indian Culture in the age of Akbar.
5. Fine Arts and Architecture in Mediæval India.
6. Social and Cultural movements in the 18th Century.
7. Impact of European Civilization on the Indian Society and Culture.
8. Decay of Indian Trade and Industry under the British régime.
9. Birth of New India and the reorientation of the Indian Thought.
10. Religion, Society and Culture in the 19th Century.
11. Political awakening under the impact of the West.
12. A bloodless revolution in the 20th Century.

*Books recommended :*

Sarkar and Dutta: Text books of Modern Indian History, Vol. I, Pts. 2 & 3.

Tara Chand: Influence of Islam on Indian Culture.

S. M. Jaffar: Some Culture aspects of Muslim Rule in India.

Carpenter: Theism in Mediæval India.

Sale Tone: Social and Economic Life of the Vijayanagar Empire.

O'Makey: Modern India and the West.



Saunders: The Pageant of Asia.

Ishwari Prasad: A short History of Muslim Rule in India.

Or

SECTION A.

*Arab and Iranian Culture from the earliest times to 750 A. D.*

The Course deals with:

1. The Arabian Peninsula as the cradle of the Semitic race, immigration of the Semitic peoples into Egypt, Mesopotamia and Syria. The Aryan immigration into Iran Cultural effect; Cyrus the Great founds the Iranian Empire.
3. The Sassanids and their contemporaries.
4. Arabia on the eve of the advent of Islam.
5. The Prophet and the Koran; the teachings of Islam *vis-a-vis* the pre-Islamic ideals of chivalry.
6. The orthodox Caliphs and the expansion of the Arabs.
7. The Ummayyads: Social Organisation; intellectual development, art and architecture.

SECTION B.

*Arab and Iranian Culture from 750 A. D. to 1300 A.D.*

The Course deals with:

1. The Abbasids: the Development of a common Islamic culture; Greek and Persian influences; the growth of science and literature, art and architecture, religious, social and cultural movements.



2. The decline of the Abbasid Caliphate and the rise of the petty dynasties of the East, the Samanids, the Buyids, the Ghaznawids the Saljuqs and the Khwarazmshahis.
3. The Development of Arabian culture and civilization in Spain; the influence of Islamic culture on European thought.
4. The development of Arab-Norman culture in Sicily.
5. The rise of the Fatimids in Egypt and North Africa.
6. The Crusades and the cultural contact of the East and the West.
7. The Mongol Invasion: Its general effects on Arab and Iranian culture; the development of Iranian Culture after the Mongol Invasion.

*Books recommended for Sections A & B.*

Sykes: Persia.

Hitti: History of the Arabs.

Bartold: Mussalman Culture.

Hell: Arab Civilization.

Levy: Persian Literature.

Ameer Ali: A Short History of the Saracens.

Samadi: Ahdi-Abbasi.

Moinuddin Nadvi: Tarikh-i-Islam. Vols. 1-4.

Lane-Poole: The Moors in Spain (omitting Chapters on Political History.)



**POLITICAL SCIENCE.****B.A. Pass.**

Students are recommended to take any *two* of the following subjects along with Political Science, provided that the combination is permissible under Ordinance 2 under the head "B.A. Pass": (1) Economics, (2) History, (3) Philosophy, (4) A Classical or Modern Language.

**B.A. Pass.**

*(For the Examinations of 1952 and after)*

There will be *three* papers as follows:—

*Paper I.—Comparative Government:*

This course includes a general survey of the Governments of the U. S. A., France (The Fourth Republic), Soviet Russia, Switzerland, Japan, and Ireland, (Eire or Southern Ireland).

The following topics will be dealt with:—

Types of constitutions. Amendment of constitution. The Legislature. The Executive—Parliamentary, Presidential and Plural. The Judiciary. Party system. Local Government. Special features of various constitutions: Rule of Law; Administrative Law; Initiative, Referendum and Recall.

*Books prescribed:*

Munro: Governments of Europe.

B. M. Sharma: Pramukh Deshon ki Shashan Pranalian.

I. D. Sharma: Modern Constitutions.



*Books recommended:*

Ogg: Governments of Europe.

Bryce: Modern Democracies.

Finer: The Theory and Practice of Modern Governments.

Sharma: Recent Experiments in Constitution-making.

B. M. Sharma: Modern Governments.

Strong: Modern Constitutions (1949 Ed.)

*Paper II.—British Commonwealth and India:*

This course includes a detailed study of the Governments of England and India, and general features of the Governments of the self-governing Dominions. The paper will be divided into two parts, one dealing with the rest of the course, and the other with India.

For 1952 The Constitution of the Indian Republic will be taught.

Constitution of India 1949. Citizenship—fundamental rights—Union Government: Executive—President, Council of Ministers, Parliament—Supreme Court. State Governments: Governor—Rajpramukh—Council of Ministers—Legislature—Judicial System—Local Government and Electorate (Central and States).

(b) England—Parliament, its composition, powers and working. The Cabinet, its relations with Parliament and King. The King and the Crown, constitutional position, powers, privileges. Judiciary. Rule of Law. Local Government.



(c) *Dominions*—Dominion Status. The Statute of Westminster. The Dominion Parliaments and Executives. Relations between the Centre and the Units. The King in relation to the Dominions. Relations with England. Central Judiciary.

*Books prescribed :*

B. M. Sharma: Modern Governments (Latest edition).

Munro: Governments of Europe.

A. C. Banerjee: The Constitution of the Indian Republic.

B. M. Sharma: Pramukh Deshon ki Shashan Pranalian.

*Books recommended :*

Ramsay Muir: How Britain is Governed.

Greaves: The British Constitution.

Bryce: Modern Democracies.

Keith: Constitution, Laws and Administration of the British Empire.

Wheare: Statute of Westminster and Dominion Status.

*\*Paper III.—The Theory of the State:*

(a) *History of Political Ideas:*

Outline of the History of Political Theory.

Plato. Aristotle. Aquinas.

Machiavelli. Hobbes. Locke Montesquieu. Rousseau. Bentham. Mill. Marx. Green. Laski.

Main features of Ancient Indian Political Theories.

\*The paper will be divided into two sections, one dealing with History of Political Ideas and the other with Political Theory.



*(b) Political Theory:*

Nature, Scope and Method of Political Science. Relation with other Sciences.

The State, its nature, origin and end.

Theories of Rights, Liberty and Equality. Theories of State action. Law. Sovereignty.

Democracy. Fascism. Nationalism. Imperialism. Internationalism. Social Justice.

*Books prescribed:*

B. M. Sharma: Rajshastra ke Mool Siddhanta.

I. D. Sharma: Political Theories—Old and New.

Garner: Political Science and Government.

Gettel: History of Political Thought.

*Books recommended:*

Asirvatham: Political Theory.

Dunning: A History of Political Theories, 4 Vols.

E. Asirvatham: Forces in Modern Politics.

Political Thought in England—(Home University Library Series):—

Laski: Locke to Bentham.

Gooch: Bacon to Halifax.

Davidson: Utilitarians.

Barker: Spencer to To-day.

Lord: Principles of Politics.

Murray: Political Science from Plato to the Present Day.

Bhandarkar: Some Aspects of Hindu Political Theories.

Sabine: History of Political Theory.



**B.A. Honours.**

*(For the Examinations of 1952 and after)*

There will be *seven* papers as follows:—

*Paper I.—Comparative Governments:*

This course includes a detailed study of the Government of England (as prescribed for Paper I of B.A. Pass), and general features (Legislature, Executives, Judiciaries, Amendment of the Constitution, Relations, between the centre and units in case of Federations) of the governmental systems of England, France (The Fourth Republic), Switzerland, U. S. S. R., Japan (New Constitution), United States of America, and the Dominions (Canada, Australia and the Union of South Africa), and Ireland.

*Books prescribed:*

Munro: Government of Europe.

Bryce: Modern Democracies.

Ramsay Muir: How Britain is Governed.

Greaves: The British Constitution.

Headlam-Morley: The New Democratic Constitution of Europe.

Sharma: Recent Experiments in Constitution-making.

B. M. Sharma: Pramukh Deshon ki Shashan Pranalian.

*Books recommended:*

H. Finer: Theory and Practice of Modern Governments.



B.M. Sharma: Modern Governments.  
Bryce: American Commonwealth, Vol. I.  
Dicy: The Law of the Constitution.  
I. Jennings: The Law of the Constitution.  
I. Jennings: Cabinet Government of England.  
Laski: Parliamentary Government in England.  
Lowell: Government of England.

*Paper II.—Government of India:*

This course includes the historical and constitutional Developments of the Indian Constitution from 1919 to the present day, with a detailed study of the Constitution of India 1949.

*Books prescribed:*

The Constitution of the Indian Republic.  
N. S. Pardasani: How India is Governed.  
A. C. Banerjee: The Constitution of the Indian Republic.  
B. M. Sharma: Pramukh Deshon ki Shashan Pranali.

*Books recommended:*

K. T. Shah: Provincial Autonomy.  
C. L. Anand: Government of India Act, 1935.

*\*Paper III.—The Theory of the State:*

(a) *The History of Political Ideas:*

Outline of the History of Political Theory:—  
Plato. Aristotle. Aquinas.

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\*The paper will be divided into two sections: one dealing with History of Political Ideas and the other with Political Theory.



Machiavelli. Hobbes Locke. Montesquieu. Rousseau. Bentham. Mill. Marx. Green. Laski.

Main features of Ancient Indian Political Theories.

Modern Political Thought since Rousseau.

*(b) Political Theory:*

Nature, scope and method of Political Science. Relations with other Sciences.

The State, its nature, origin and end.

Theories of Rights, Liberty and Equality, Theories of State action. Law. Sovereignty.

Democracy. Facism. Nationalism. Imperialism. Internationalism. Social Justice.

*Books prescribed:*

I. D. Sharma: Political Theories—Old and New.

Garner: Political Science and Government.

Sabine: History of Politics Thought.

B. M. Sharma: Rajshastra ke Mool Siddhanta.

*Books recommended:*

Asirvathan: Political Theory.

Gettel: History of Political Thought.

Dunning: A History of Political Theories, 3 Vols.

E. Asirvatham: Forces in Modern Politics.

Political Thought in England (Home University Library Series).

Laski: Locke to Bentham.

Gooch: Bacon to Halifax.

Davidson: Utilitarians.

Barker: Spencer to To-day.



Lord: Principles of Politics.

Gettel: Introduction to Political Science.

Bhandarkar: Some Aspects of Hindu Political Theories.

Merrian and Barnes: History of Political Theories.

*Paper IV.—Either*

*(A) English Constitutional History from 1603 to the Present Day:*

(A background of the earlier period will be required).

Struggle between the Stuarts and Parliament: The Theory of the Divine Right of Kings: Petition of Rights: The Civil War.

The Commonwealth,...The *Habeas Corpus* Act: The Revolution of 1688.

Kingship .... (a) In the 18th Century.

.... (b) In the 19th Century.

House of Lords .... (a) Up to 1832, (b) From 1832 to 1911.

(c) From 1911 to 1932—  
Problem of Reform.

House of Commons .... (a) The Unreformed House,  
(b) From Reform Act of 1832 to Reform Acts of 1911 and 1918.



Cabinet .... .... (a) Origin, (b) Growth, and  
(c) Development—War  
Cabinet.

Privy Council; Judiciary; Local Government; Constitutional Relations of the Dominions with the Mother Country.

*Books prescribed:*

Adams: English Constitutional History.

Taswell-Langmead: English Constitutional History.  
(Latest Edition).

S. V. Puntambekar: English Constitutional History.

Keir: Constitutional History of Modern Britain,  
1485-1937.

*Books recommended:*

Dicey: Law of the Constitution. (Latest edition).

Medley: English Constitutional History.

Prothero: Statutes and Constitutional Documents.

Pollard: Evolution of Parliament.

*Or*

*(B) Indian Constitutional History from 1600 to the  
Present Day:*

Organization, powers and working of the East India Company; the Charter Acts and connected legislation; the evolution of the Judicial System and District System; the growth of the Civil Service, the Government of India Act, 1858; the Indian Council Act, 1861, 1892, 1909, Government of India Act, 1919 (with later amendments); Government of India Act, 1935; Dyarchy; the



Development of Local Self-Government; Relations of the Government of India with Indian States. Constitutional Developments from 1935 to 1949.

*Books prescribed:*

Keith: Indian Constitutional History.

Punniah: Indian Constitution.

Constitution of the Indian Republic.

Indian Statutory Commission Report, Vol I.

*Books recommended:*

Keith: Speeches and Documents on Indian Policy.

Ilbert: The Government of India.

A. C. Banerjee: Indian Constitution Documents,  
2 Vols.

Ramsay Muir: The Making of British India.

Panniker: India States and the Government of India.

Sharma: Indian Federation.

G. N. Singh: Landmarks in Indian Constitutional  
Development.

Raghubir Singh: Indian States and the New Regime.

K. K. Bhattacharya: The Indian Constitution.

*Or*

*(C) Constitutional Development of British Dominions and Colonies.*

This course will deal with the main phases of the development of the British Commonwealth, the relations between Great Britain and the original Colonies, the grant of representative institutions and self-government



to the Colonies, the gradual growth of autonomy in Canada, Australia and South Africa till their becoming Dominions, the various accompanying institutional and conceptual developments till the present day.

*Books prescribed:*

Kennedy: The Constitution of Canada and its Developments.

Quick and Garran: Constitution of Australia.

Kenned and Schlosberg: Union of South Africa.

Wheare: Statute of Westminster and Dominion Status.

*Books recommended:*

Dawson: The Development of Dominion Status.

Zimmern: The Third British Empire.

Ramsay Muir: History of the British Commonwealth.

Durham: Report on the Affairs in Canada.

Keith: Speeches and Documents on British Colonial Policy.

Keith: Responsible Government in the Dominions.

*Paper V.—(a) Principles of Sociology:*

(Syllabus and books same as in the Economics and Sociology Department.)

*Or*

*(b) Federalism:*

This course will include a study of the principles and practice of Federalism in Ancient Greece, Mediæval times and the Modern Period, with special reference to the history of the Federations. The new Federal Constitution of India.



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*Books prescribed:*

Sharma: Federal Polity.

Bryce: The American Commonwealth.

Hamilton: The Federalist.

Sharma: The Indian Federation.

Wheare: Federal Government.

*Books recommended:*

Brooks: Government in Switzerland.

Egerton: Federations and Unions in the British Empire.

Newton: Federal and Unified Constitutions.

Brand: Union of South Africa.

Canaway: The Failure of Federalism in Australia.

S. Mogi: Problem of Federalism.

Dawson: Canadian Constitutional Development.

Choudhry: Second Chambers in Federations.

Government of India Act, 1935.

The New Constitution of India.

Report of the Royal Commission on the Australian Constitution.

*Or*

*(c) The Principles and Methods of State Activity:*

The course will deal with the principles and methods of State Activity, and with a survey of what the State does in respect of Social problems particularly the problems of Social Security in India.



The course will include the following topics:—

- I. (a) Theories of State Action.  
(b) Social Harmony.  
(c) Social Justice.  
(d) Progress.  
(e) Principles of Social Legislation.  
(f) Methods and Techniques of Social Reform.  
(g) Social Service State.
- II. (a) Poverty, Unemployment and Poor relief.  
(b) Labour welfare.  
(c) Theories of punishment. Causes of crime.  
Treatment of criminals.  
(d) Liquor traffic. Prohibition in India.  
(e) The problem of defectiveness. The insane  
and other mental defectives. The blind,  
the deaf and the dumb.  
(f) Schemes of Basic Education.  
(g) Position of women in India; Legislation to  
improve their condition.

*Books recommended:*

Ford: Social Problems and Social Policy.

Ram: The State in relation to Labour in India.

Brown: Underlying Principles of Modern Legislation.



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*Books recommended:*

- Hobhouse: Elements of Social Justice.  
Jerome Davis: Contemporary Social Movements.  
Simey: Principles of Social Administration.  
Asirvatham: A New Social Order.  
Elliot and Merrill: Social Disorganisation.  
Sargent Report on Post-War Educational Development in India.  
Rajagopalachari: Prohibition.  
Kumarappa (Ed.): Our Beggar Problem.  
Clarke: Social Administrator.  
Appasamy: Legal Aspects of Social Reform.  
Mangold: Social Pathology.  
Haynes, F. E.: The American Prison System.  
Leo Page: Crime and the Community.  
Dhawan, G. N.: Political Philosophy of Mahatma Gandhi.

*Paper VI.—Contemporary History and Governments of Asia (excluding India):*

This course will deal especially with the recent history of Eastern civilisation and institutions and the modern constitutions of Japan, China, Siam, Viet Nam, Indonesia and Philippines, Afghanistan, Iraq, Persia, Turkey, Palestine and Egypt. It will also cover such points as the intrusion of the Western world into these regions, the impact of Occidental civilisation on Eastern cultures, and specific problems of administration and Government. The growth and development of representative institutions and parliamentary Government will be studied in detail.



*Books prescribed:*

- Quigley: Japanese Government and Politics.  
Linebarger: Government in Republica China.  
Hasketh Bell: Foreign and Colonial Administration  
in the Far East.  
Kitazawa: The Government of Japan.  
Kalaw: Self-Government in the Philippines.  
Wu: Government and Politics of China.  
Toynbee and Kirkwood: Turkey.  
Young: Egypt.  
V. S. Ram: Comparative Colonial Policy.  
Buck and Masland: Governments of Foreign Powers.  
Treat: Far East.

*Books recommended:*

- Ireland: The New Korea.  
Harris: Europe and the East.  
Hooper: The Constitutional Laws of Iraq.  
Hampden-Jackson: The Post-War World.  
Gibbons: The New Map of Asia.  
Dutcher, Geo. M.: The Political Awakening of the  
East.  
Iqbal Ali Shah: Afghanistan.  
Kohn: History of Nationalism in the East.

*Paper VII.—One of the following subjects:—*

1. Local and Municipal Governments (with special reference to British India).
2. Contemporary Political Thought.



3. Principles of Jurisprudence.
4. International Institutions.
5. Colonial Policy and Administration.
6. Public Administration.
7. The New Governments of Europe from 1919 to 1939.

For 1952 the following alternatives will be open. :—

1. Local and Municipal Governments.
2. Contemporary Political Thought.
3. Principles of Jurisprudence.
4. Colonial Policy and Administration.
5. Public Administration.

1. *Local and Municipal Governments* (with special reference to British India).

A study of the Local and Municipal Institutions of Great Britain, France, Germany, and the U. S. A., and a detailed study of the Government of Indian Cities, District and Local Boards, and Panchayats, and discussion of their chief administrative problems.

*Books recommended:*

Munro: *Government of American Cities*

Robson: *The Development of Local Government in England.*

Indian Statutory Commission Report, Vol. VI. (*Memorandum on Local Government.*)

Munro: *Municipal Administration.*

Shah: *Constitution, Functions and Administration of Indian Municipalities.*

Finer: *English Local Governments.*



Anderson: Local Government in England.

Harris: Comparative Local Governments.

Municipal and District Board Acts of the U. P.  
and U. P. Village Panchayat Act.

## 2. *Contemporary Political Thought.*

The heritage from the 20th Century: New methods in Political Science, especially the quantitative method. Influence of recent psychology. Pluralism. The legal and sociological views of the State. Schools of Socialism. Syndicalism and Anarchism. 20th Century Liberalism and Conservatism. Fascism. Problems of Democracy. Political Philosophies of Sunyet Sen and Gandhi.

### *Books prescribed:*

Wallas: Human Nature in Politics.

Laski: The State in Theory and Practice.

Coker: Recent Political Thought.

### *Books recommended:*

Merrian and Barnes: History of Political Theories.

Rice: Quantitative Methods in Politics.

Wallas: The Great Society.

Wallas: Our Social Heritage.

McIver: The Modern State.

Duguit: Law and the Modern State.

Cole: The Meaning of Marxism.

Strachey: The Theory and Practice of Socialism.

Lippmann: The Good Society.

Elliot: Pragmatic Revolt in Politics.

Oakshott: Social and Political Doctrines of Contemporary Europe.



Dunning: A History of Political Theories, Vol. 3.  
McIver: Leviathan and the People.

Dhawan, G. N.: Political Philosophy of Mahatma Gandhi.

3. *Principles of Jurisprudence:*

1. Science of Jurisprudence: Different Schools of Jurisprudence.

2. The Nature and Sources of Law: Kinds of Law, Civil Law, the State, Sources of Law.

3. The Elements of Law: Legal Rights, Ownership Possession, Persons, Liability, Intention, and Negligence, Law of Procedure.

*Books prescribed:*

Salmond: Jurisprudence (9th Edition, Ed. by Parker).

Patten: Jurisprudence.

*Books recommended:*

Austin: Jurisprudence.

Keeton: Elementary Principles of Jurisprudence.

Vinogradoff: Historical Jurisprudence.

Maine: Ancient Law.

4. *Colonial Policy and Administration:*

*Books prescribed:*

Ram: Comparative Colonial Policy.

Reinsch: Colonial Government.

Lord Hiley: Africa.

“Colonies”: Royal Institute of International Affairs.

Holcombe: Government of Dependencies.



### 5. *Public Administration:*

The course will deal with the principles of (i) departmental organisation and (ii) personnel management particularly with regard to the problems of selection and recruitment, training, classification, promotion, service conditions, employees organisations and public relations.

#### *Books prescribed:*

Willoughby: Principles of Public Administration.

White: Introduction to Public Administration.

Finer: British Civil Service.

Warner: Principles of Public Administration.

White: Civil Services in Modern State.

Martin Marx: Elements of Public Administration.

Pfiffner: Principles of Public Administration.

### **M.A. Part I.**

(Same as for B.A. Honours except Papers I to III).

### **M.A. and M.A. Part II.**

*(For the Examinations of 1952 and after)*

*Paper I—A Comparative Study of Political Thought  
with a detailed study of Prescribed Texts:*

#### *Texts prescribed:*

Aristotle: Politics.

Mill: On Liberty.

#### *Books recommended:*

Barker: Aristotle's Politics.

McCullum: Mill's Liberty and Representative Government.



Green: Principles of Political Obligation.

Poster: Master of Political Thought, Vol. I.

Jones: Master of Political Thought, Vol. II.

Sabine: History of Political Theory.

Dunning: History of Political Theories.

Vaughan: Studies in the History of Political Ideas.

Home University Library: 4 Vols. on Political Thought in England.

Gettel: Readings in Political Science.

NOTE.—The paper will be divided into 2 parts, one on the Texts prescribed and the other on the rest of the course.

*Paper II.—International Law:*

The historical development and practical application of the rules governing the intercourse of nations at the present day as shown in diplomatic discussion, decisions of international tribunals, and the doctrines of the chief writers and recent judicial interpretation and application of the principles of International Law. Cases which have particularly influenced modern International Law, including cases before the Permanent Court of International Justice, will be studied.

*Books prescribed:*

Fenwick: International Law.

Oppenheim: International Law, (Latest edition)  
(Lauterpacht).

Pitt-Cobbett: Leading Cases in International Law.  
(2 Vols.) (Latest Ed.)

Jessup: A Modern Law of Nations.

K. K. Bhattacharya: Principles of International Law.



*Books recommended:*

- Hall: International Law (Ninth Edition).  
 Lawrence: Principles of International Law.  
 Briggs: Readings and International Law.  
 A. P. Higgins: Hague Peace Conferences.  
 Garner: Recent Developments in International Law.  
 Garner: International Law and the World War.  
 P. B. Potter: International Organisation.  
 Stowell: International Law.  
 McNair and Lauterpacht: Annual Digest of Public  
     International Law Cases.  
 Martin Hill: Future of International Law.  
 Hyde: International Law, 3 Vols, (1945 Ed.)  
 United Nations Charter.

*Paper III.*

*Either (1) Ancient Indian Political Thought:*

*Or (2) International Relations, U. N. O. and Allied  
     Organisations.*

*Or (3) History of North America, with special re-  
     ference to U.S.A. from 1763 to the Present  
     Day:*

*[Or (4) Development and Structure of International  
     Organisation:*

*Syllabus and Books prescribed for (1) Ancient Indian  
     Political Thought:*

The paper will deal with Ancient Indian Political  
 Thought. The following thinkers will be studied:

Manu, Shukra, Bhishm, and Kautilya.



*Books prescribed :*

Haug: Aiteriya Upanishad (English Translation).

Shukra: Niti.

Manu: Chapter VII of the Smriti.

Mahabharat: Shanti Parva.

Kautilya: Arthshastra.

Jayaswal: Hindu Polity.

*Books recommended :*

Jayaswal: Hindu Polity.

Vishwanath: International Law in Ancient India.

Cambridge History of India, Vol. I, Chapters IV, V, X—XIII.

Ghoshal: Hindu Political Theories.

Anjaria: Political Obligation in the Hindu State.

Dikshitar: Hindu Administrative Institutions.

Dikshitar: Mauryan Polity.

*Syllabus and Books recommended for (2) International Relations:*

The course is intended to provide a general introduction to the study of International Relations and will consist of a study of the following topics:

*General and European:* The development of the Modern State System: the growth of the Great Powers; the alignment of Powers before 1914; the Peace Settlement of 1919—23; the League of Nations; the Foreign



Policies of Great Britain, France, Germany, Italy and of the Soviet Union, between the two Wars, the re-alignment of Powers before 1939; the course of the 1939—45 War; Recent developments since World War II.

The problem of minorities in Europe; disarmament; Palestine; Egypt and Sudan;

*American:* The Monroe Doctrine and its various extensions; Central America and South America; Pan-Americanism; U. S. A's relations with China, Japan and Philippines; the Diplomatic History of the Panama Canal.

*Far Eastern:* The opening of the Far East; the Washington Conference of 1921-22; Japanese Chinese relations since 1914; the Policies of the Soviet Union, Great Britain and France towards China and towards Japan; Extra-territoriality; Recent Developments in South East Asia.

*Books prescribed:*

Carr: International Relations since the Peace Treaties (Latest Ed.)

Schumann: International Politics (Latest Ed.)

Mathews: Foreign Relations of U. S. A. (Latest Ed.)

Perkins: Evolution of American Foreign Policy.

Charter of the United Nations Organisation.

*Books recommended:*

Mowat: The European State System.

Gathorne Hardy: A Short History of International Affairs,

Buell: International Relations.

Nevins: America in World Affairs.

Bemis: A Diplomatic History of the United States.



Perkins: Hands off—A History of the Monroe Doctrine 1823-1940.

Noel Baker: Disarmament.

Macartney: National States and National Minorities.

Hoffmann: Pacific Relations.

Hudson: The Far East in World Politics.

P. J. Treat: The Far East.

*Syllabus and Books recommended for (3) History of North America, with special reference to U. S. A. from 1763 to Present Day:*

The course will include a short history of Canada and North America from 1763 up to the present day, dealing with the social, economic and political development of the North American Continent. The international relations of these countries as world powers will be studied. Special emphasis will be laid on the U. S. A. in its national and international development. The colonial policy of the U. S. A. in the Carribean, the Pacific and Asia will also be studied.

*Books recommended:*

Channing: Student's History of the United States (Macmillan).

Beard: American History.

Beard: The Rise of American Civilisation.

Muzzey: History of the American People.

Coolidge: United States as a World Power.

A. B. Hart: Formation of the Union.

Roberts: History of Canada.

Cobett and Smith: Canada as a World Power.



Kennedy: The Constitution of Canada.

Woodrow Wilson: Division and Re-union.

Latini: American Foreign Policy.

*Syllabus and Books recommended for (4) Development and Structure of International Organisation:*

The course will include a detailed study of the Development of International Organisation, Administration, Political and Economic. Study of the following bodies is included in the course:—

The International Labour Office; the League of Nations and its auxiliary bodies especially the Permanent Mandates Commission; the Court of International Arbitration; the Permanent Court of International Justice; the various Organs of the United Nations, especially the Security Council, the Trusteeship Council, the Economic and Social Council, the International Court of Justice.

Regional bodies such as the Pan American System, the Arab League, are also to be studied.

The study of these Institutions will include a critical examination of their Constitutions, the record of their activities and of the reasons of their success or failure.

*Books prescribed:*

P. B. Potter: International Organisation.

C. K. Webster: The League of Nations in Theory and Practice.

Bernes: The History of the International Labour Organisation.

United Nations Document, 2 Vols.



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*Books recommended:*

Mower: International Government.

Howard, K. Ellis: Origin, Structure and Working of the League of Nations.

Soland (Ed.): Labour as an International Problem.

Wright: Mandates under the League of Nations.

Macaulay: Mandates.

*Paper IV.—Essay:*

(N. B.—In lieu of Papers III and IV a Thesis may be presented on a subject approved by the Head of the Department).

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**ECONOMICS****B.A. Pass.**

*(For the Examinations of 1952 and after)*

There shall be *three* Papers as follows:—

Paper I.—Principles of Economics.

Paper II.—Social Institutions and Culture.

Paper III.—Indian Economic Conditions.

*Paper I.—Principles of Economics.*

Nature of Economics, Scope and Method, Basic Concepts, Competition, Statics and Dynamics, and Equilibrium Functions of an Economic System.

Wants, Utility and Laws of Utility. Laws of Demand. Statistics of Consumption.

Brief Survey of Economic stages. The Laws of Returns. The Concept of Optimum. Cottage and Village Industries. Machine Industry. The growth of Capitalism. Forms of Industrial Organisation. Scientific Management. Rationalization. Economic Planning.

Laws of markets. Theories of value. Special cases of value. Monopolies.

The National Dividend. Problems of Distribution. Rent. Wages. Interest. Profits.

Money. Modern Money. Monetary Standards. Value of Money. Index Numbers. Inflation, Deflation and Reflation. Effects of changes in the value of money. Banks. Balance Sheets. Central Banks. Business Cycles.



Canons of Taxation. Principle Theories of Taxation, Single Tax *versus* Multiple Tax System. Proportional Taxation. Features of good Tax System.

Sources of Public Income. Classification of Public Expenditure. Productive and Unproductive Expenditure.

Nature and Classification of Public Debt. Loans *versus* Taxes. Funded, Unfunded and Floating Debt. Treasury Bills. Redeemable and non-redeemable loans. Conversion. Redemption. Methods of Redemption. Sinking Fund. Capital Levy. Repudiation of Public Debts.

National and International Trade. Theory of Comparative Costs. Balance of Trade. Balance of Accounts. Case for Free Trade and for Protection. Drawbacks of Protection. Imperial Preference. Foreign Exchange.

The Economic System in relation to the State Capitalism and its Social Structure. Rise of Socialism. Poverty. Unemployment and Types of Relief. Social Security.

*Books recommended:*

\*Briggs and Jordan: Text-Book of Economics.

Burns, Neal and Watson: Modern Economics.

Marshall: Principles of Economics.

\*Cairncross: Introduction to Economics.

मुरली घर जोशी :द्रव्य शास्त्र

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\*Books marked with an asterisk are prescribed for intensive study.



*Paper II.—Social Institutions and Culture.*

Influence of Physical features on Economic Life. Climate and Economic Development. The World's major Economic regions and their relations, Climate and Race: Climate and Culture.

Principles of Social Structure, Clan, Dual Organisation, Family Kinship, Age-grades, Sex Divisions, Totemic Groups, Incest and Exogamy; Forms of Marriage.

Race, Tribe and Caste. Changes in the Caste System. The Joint Family. The Economic Significance of Caste and Joint Family. The Village Community.

Social structure and Economic life of the Primitive Tribes and Castes of the U. P. Contacts with Civilisation.

Primitive Religion, Primitive Art and Ritual, Taboo and Observances, Fasts, Festivities and Observances of the common people.

Evolution of Agriculture. Early forms of Economic Life.

Beginnings of Social Life. Origins of the Family. Men's Organic and Social Heritage. The Regional Basis of Society. Cultural Type and the Environment.

Size, growth and quality of Population. Population Trends in Asia and the West. Density of Population and Associated Problems

Types of Social Groups. Familistic Groups. Interest Groups. Class and Caste Principles. Social Change and the Class System. The Harijan Classes.

The Family Institution. Recent changes in the Family. Marriage and its patterns.



Patterns of Habitations and their distribution, Contrasts of Rural and Urban Communities, Industrialisation and its Social consequences.

Social Control. Methods by which Control is achieved, and Organised. Social Relations of Religion. Social change and Social values.

*Books recommended:*

\*Gillin and Gillin: Introduction to Sociology.  
Wissler: Introduction to Social Anthropology.

O' Malley: India's Cultural Heritage.

Huntington: The Human Habitat.

\*Majumdar: Races and Cultures of India (2nd Edn.)

Firth: Human Types.

*Paper III.—Indian Economic Conditions.*

Agricultural Regions of India. Distribution of Mineral Resource and Industries. Factors underlying the distribution of Population. Indian dietary and the standards of living.

Village and Cottage Industries. Organised Industries. Problems of Industrial Labour. Industrial Finance. The State and Industry. Foreign Capital and Enterprise.

Land Tenure and Land Revenue. Tenancy Legislation in the U. P.

Indian Railways. Irrigation in India.

Agricultural Problems. Co-operation.

Principal features and trends of Indian Foreign trade and its distribution. Home Charges. The Finance of Indian Foreign Trade. Free Trade *versus* Protection in India. Discrimination: Protection. Trade Agreements.

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\*Books marked with an asterisk are prescribed for intensive study.



Indian Currency System. Indian Banking. Indigenous Banks. Joint Stock Banks. Foreign Exchange Banks. Co-operative Banks. The Reserve Bank of India.

Chief features of Indian Finance. Chief Sources of Central Revenue. Customs. Income Tax. Opium Duty. Salt Tax. Central Excise Duties. Main items of Public Expenditure in the Central Government.

Federal and Provincial Finance.

Indian Public Debt. Rupee *versus* Sterling Loan. The Indian Budget.

*Books recommended:*

\*Wadia and Merchant: Our Economic Problem.

Mukerjee and Dey (Ed.): Economic Problems of Modern India (2 Volumes).

Nanavati and Anjaria: Indian Rural Problem.

\*Muranjan: Economics of Post-War India.

Recent Social and Economic Trends in India (Government of India.)

Jain: Indian Economy during War.

**B.A. Pass.**

**Anthropology.**

There shall be *three* Papers:

*Paper I.—Physical Anthropology.*

Race and Environment; Prehistoric Climates; Man's Position in the Animal Kingdom; Origin and Evolution of Man; Early Types of Man; their Distribution; Early Migrations, Domestication of Plants and Animals; Origins of Agriculture and Irrigation, Primitive Habitations; Racial Criteria; the Concept of Race in Relation to Culture and Language; Racial History of India; Race migrations and racial admixture. Principles of Anthropometry.

\*Books marked with an asterisk are prescribed for intensive study.



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*Books recommended:*

Keith: Antiquity of Man.

Elliot Smith: Early Man.

Griffith Taylor: Environment and Race.

Haddon: The Wanderings of Man.

Stibbe: An Introduction to Physical Anthropology.

\*Census Report of India, Vol. I, Pt. IIIA.

*Paper II.—Social Institutions and Culture.*

(Same as Paper II in Economics)

*Paper III.—Prehistoric Archæology.*

Prehistoric Culture, the working of Stone for tools, the Core Industries and Flake Industries and their sequence; bone implements; Palæolithic and Neolithic Cave Arts; Arts and Crafts of Prehistoric and Modern Primitive Peoples; Recent Discoveries in India, China, Palestine and Africa. Megalithic Cultures.

*Books recommended:*

\*Quennell: Every Day Life in Prehistoric Times.

Osborn: Men of the Old Stone Age.

Burkitt: Our Early Ancestors and Stone Age.

Childe: Man Makes Himself.

\*Mackay: Indus Valley Civilization.

\*Leakey: Adam's Ancestors.

Childe: New Light on the most Ancient East.

Sayce: Primitive Arts and Crafts.

Peake and Fleure: Corridors of Time Series.

Prehistoric Hunters.

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\*Books marked with an asterisk are prescribed for intensive study.



## B.A. Honours and M.A. Part I.

## Economics and Sociology.

*(For the Examinations of 1952 and after)*

B.A. Honours students will have to take *five* Papers.

*Paper I.—Advanced Economics.*

*Paper II.—Currency and Banking.*

*Paper III.—Principles of Sociology.*

*Paper IV(A).—Modern Economic History.*

*Or*

*IV(B).—Social Anthropology.*

*Paper V.—Statistics.*

For M.A. (Part I) students there will be *four* Papers only *i.e.*, Papers I, II and III, as for B.A. Honours, and any one of the following.—

*(A) Modern Economic History.*

*(B) Social Anthropology.*

*(C) Statistics.*

*Paper I.—Advanced Economics:*

*Books recommended:*

Robbins: The Nature and Significance of Economic Science.

Blodgett: Contemporary Economic Systems.

Grouchy: Modern Economic thought.

\*Mayers: Elements of Modern Economics.

\*Mukerjee: The Institutional Theory of Economics.

Wicksell: Lectures on Political Economy, Vol. I.

Hicks: Value and Capital (Selected Chapters).

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\*Books marked with an asterisk are prescribed for intensive study.



Pigou: Economics of Welfare (Selected Chapters).

Dobb: Political Economy and Capitalism.

\*Wicksteed: Commonsense of Political Economy.

Stigler: The Theory of Price.

Mukerjee: Political Economy of Population.

Boulding: Economic Analysis.

Hablar: Property and Depression.

*Paper II—Currency and Banking.*

*Books recommended:*

\*Crowther: An Outline of Money.

Hansen: Monetary Theory and Fiscal Policy.

Halm: Monetary Theory.

\*Saulnier: Contemporary Monetary Theory.

Keynes: Treatise on Money.

\*Sayers: Modern Banking.

Morgan Webb: Monetary Management.

\*Malhotra: History of Indian Currency.

Muranjan: Modern Banking in India.

K. N. Raj: Monetary Policy of the Reserve Bank of India.

Annual Reports of the Reserve Bank of India on Currency and Finance.

*Paper III.—Principles of Sociology.*

*Books recommended:*

\*MacIver: Society.

House: Range of Social Theory.

Hertzler: Social Institutions.

\*Mukerjee: Man and his Habitation.

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\*Books marked with an asterisk are prescribed for intensive study.



\*Elliot and Merill: Social Disorganisation.

\*Ginsberg: Moral Progress.

J. Huxley: Man in the Modern World.

Forde: Habitat, Economy and Society.

Mukerjee: The Social Structure of Values.

*Paper IV (A).—Modern Economic History* (with special reference to India).

*Books recommended:*

Bogart: Economic History of Europe.

Dobb: Soviet Economic Development Since 1917.

Dobb: Studies in the Development of Capitalism.

Birnie: An Economic History of Europe (1760-1930).

\*World Economic Surveys (League of Nations).

Faulkner: American Economic History.

Lewis: Economic Survey 1919-1939.

Gadgil: The Industrial Evolution of India in recent times.

\*Vera Anstey: The Economic Development of India.

Buchaman: The Development of Capitalistic Enterprise in India.

\*Rao: War and Indian Economy.

Report of the ECAFE Conferences.

OR

*IV (B).—Social Anthropology.*

*Books recommended:*

\*Boas (Ed.): General Anthropology.

\*Books marked with an asterisk are prescribed for intensive study.



\*Lowie: Primitive Society.

Malinowski: Crime and Custom in Savage Society.

Roy: Mundas and Their Country.

Herskovits: Economic Life of Primitive Peoples.

Gorer: Himalayan Village.

Hutton: Caste in India.

Majumdar: Fortunes of Primitive Tribes.

OR

*V or IV(C).*—*Statistics* (Methods and Applications to Economics and Sociology).

*Books recommended:*

\*Connor: Statistics in Theory and Practice.

Yule and Kendall: An Introduction to the Theory of Statistics.

Statistical Abstract for British India.

Economic Enquiry Reports.

Bowley Robertson Committee Report.

\*Guide to Current Official Statistics (Government of India.

Census of India, 1941.

Hargood: Statistics for Sociologists.

Kuchzynski: Measurement of Population Growth.

Ghosh and Ellahance: Indian Statistics.

Croxten and Cawden: Applied General Statistics.

Allen: Social Surveys.

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\*Books marked with an asterisk are prescribed for intensive study.



## M. A. Part I.

## Anthropology.

*(For the Examination of 1952)*

There shall be four Papers:

*Paper I.—Prehistory and Technology:**Books recommended:*

De Morgan: Prehistoric Man. Burkitt: Our Early Ancestors. Hocart: The Progress of Man. Hornell: Water Transport. Osborn: Men of the Old Stone Age. Boas: Primitive Art. Mitra: Prehistoric India. Shankalia: Investigations Into Prehistoric. Archaeology in Gujarat, Vol. I. Piggot: Prehistory of India.

*Paper II.—Ethnology.**Books recommended:*

Coon: Races of Europe.  
Keane: Man Past and Present.  
Seligman: Races of Africa.  
Chanda: Indo Aryan Races.  
Ruggeri and Chakladar: First Outlines of Systematic Anthropology of Asia.  
Ashley Montague: Man's Most Dangerous.  
Myth: The Fallacy of Race.  
Klineberg: Race Differences.  
MacCrone: Race Attitudes in South Africa.  
Stonequist: The Marginal Man.

*Paper III.—Social Anthropology.* (As in M. A. Part I, Economic and Sociology).*Paper IV.—Principles of Sociology.*

(As in M. A. Part I, Economics and Sociology).

B. A. Hons. students will have to offer *four* Papers as above and in addition the Paper in Statistics as in B. A. Hons. and M. A. Part I, Economics and Sociology.



M.A. and M.A. Part II.

Economics and Sociology.

(For the Examinations of 1952 and after)

EITHER

(GROUP A)

*Paper I.—History of Economic Thought.*

*Books recommended:*

\*Selected Chapters from Adam Smith, Malthus, Ricardo, J. S. Mill, List, Marx, Marshall and Keynes  
Dillard: Keynesian Economics.

Dillard: Reading in Theory of Income Distribution.

\*Erich Roll: History of Economic Thought.

Spann: Types of Economic Theory.

Ladler: Social and Economic Movements.

Ellis: A Survey of Contemporary Economics.

American Economic Association.

Readings in the Theory of Income Distribution.

*Paper II.—Indian Agricultural Economics and Co-operation.*

*Books recommended:*

Report of the Royal Commission on Indian Agriculture.

Gangulee: Trends of Population and Agriculture in the Ganges Valley.

Report of the Bengal Famine Inquiry Commission, Volumes I and II.

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\*Books marked with an asterisk are prescribed for intensive study.



\*Mukerjee: Food Planning for Four Hundred Millions.

Report of the Provincial Banking Enquiry Committee, U. P.

Review of the Co-operative Movement in India  
(Published by the Reserve Bank of India).

\*Report of the Agricultural Sub-Committee on Credit.

Report of the Co-operative Planning Committee.

Schultz: Agriculture in an Unstable Economy.

Baljit Singh: Population and Food Planning in India.

Report of the Zamindari Abolition Committee.

\*Baljit Singh: Whither Agriculture in India?

\*Talmaki: Co-operation in India.

\*Report of the Agricultural Prices Sub-Committee.

Report of the Land Revenue Commission in Bengal.

*Paper III.—Public Finance.*

*Books recommended:*

Lutz: Public Finance.

\*Dalton: Public Finance.

\*Hicks: Public Finance.

Taylor: The Economics of Public Finance.

\*Lanka Sundaram and Vitha Babu: Union Finance.

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\*Books marked with an asterisk are prescribed for intensive study.



Wattal: Indian Government Finance.

\*Thomas: The Evolution of Federal Finance in India.

Gyan Chand: Local Finance.

Annual Report of the Reserve Bank of India on Currency and Finance.

B. Das Gupta: Provincial Taxation under Autonomy.

Alvin H. Hunsen: Economic Policy and Full Employment.

Report of the Indian Statutory Commission (1930)  
Vol. I, Part V.

*Paper IV.*—Any one of the following:—

(a) *Labour Problems* (with reference to India).

*Books recommended:*

\*Report of the Labour Investigation Committee,  
Government of India.

Wages: A General Report (I. L. O. publication).

Adarkar: Report on Health Insurance for Industrial Workers.

Butler: Industrial Labour in the East.

\*Mukerjee: The Indian Working Class.

Planning for Labour.

Report of the Bihar Labour Enquiry Committee.

Report of the Bombay Textile Labour Enquiry Committee.

Report of the U. P. Labour Enquiry Committee.

\*Books marked with an asterisk are prescribed for intensive study.



Beveridge: Full Employment in a Free Society.

\*Dobb: Wages.

(b) *International Economics.*

*Books recommended:*

Haberler: Theory of International Trade.

Ragnekar: Imperfect Competition and International Trade.

Ohlin: International and Inter-regional Trade.

Condliffe: The Re-construction of World Trade.

\*Gangulee, B. N.: Re-construction of India's Foreign Trade.

Viner: Trade Relations between Free Market and Controlled Economics.

(Second Impression) (L. O. N. P. 1943).

Commercial Policy in the Post-War World (L. O. N. P.)

\*Government of India: Review of India's Trade.

Adarkar: Indian Fiscal Policy.

World Economic Survey, I. L. O. and U. N. O. (Latest.)

Mukerjee: Races, Lands and Food.

Patterson: Introduction to World Economics.

Euke and Salera: International Economics.

\*Books marked with an asterisk are prescribed for intensive study.



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OR

(GROUP B)

*Paper I.—Advanced Sociology.*

*Books recommended:*

\*Giddings: Principles of Sociology.

\*Sorokin: Contemporary Sociological Theories.

\*Young: Social Psychology.

Mukerjee: Social Ecology.

\*Lapierre: Sociology.

Parsons: The Structure of Social Action.

Mukerjee: The Social Function of Art.

Lundberg: Foundations of Sociology.

Sherif: The psychology of Social Forms.

Bernard: The Field and Methods of Sociology.

\*Gurvitch and Moore: Twentieth Century Sociology.

*Paper II.—Advanced Anthropology.*

*Books recommended:*

\*Kroeber: Anthropology.

Malinowski: Scientific Theory of Culture and Other Essays.

\*Malinowski: Dynamics of Culture Change.

Meade: Co-operation and Competition in Savage Society.

Kroeber: Configuration of Cultural Types.

Linton: The Cultural Background of Personality.

Pitt Rivers: The Clash of Cultures and Contracts of Races.

Furnivall: The Netherlands India—a study in Plural Economy.

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\*Books marked with an asterisk are prescribed for intensive study.



Reuter: Race and Culture Contact.

Karandikar: Hindu Exogamy.

Ghurye: The Aborigine, So-called and Their Future.

Mills, Majumdar and others (Ed): Essays in Anthropology (selected Chapter).

*Paper III.—Culture and Civilisation.*

*Books recommended:*

Aushen (Ed): Science and Man.

\*Sorokin: Culture, Society and Personality.

\*Bougle: The Evolution of Values.

Boodin: The Social Mind.

\*T. H. and Julian Huxley: Evolution and Ethics.

Kardiner: The Individual and His Society.

Mumford: Technics and Civilisation.

\*Toynbee: Study of the History (Somervell's abridged edition).

Sorokin: The Crisis in our Age.

*Paper IV.—Any one of the following:—*

(a) *Labour Problems* (with reference to India).

*Books recommended:*

[Same as in Paper IV (a), (Group A)]

(b) *International Economics.*

*Books recommended:*

[Same as in Paper IV (b), (Group A)]

A thesis preferably based on field investigation may also be offered instead of an optional paper in either Group.

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\*Books marked with an asterisk are prescribed for intensive study.



## M. A. and M. A. Part II.

### Anthropology.

(For the Examinations of 1952 and after)

There shall be *three* Groups A, B and C. The following Papers are compulsory for all the Groups:—

*Paper I.—Organic Anthropology:*

*Books recommended:*

Duckworth: Morphology & Anthropology Vol. I.

Wood Jones: Man's Place among Animals.

Le Gros Clarke: Early Forerunners of Man.

Hooton: Up From the Ape.

Gates: Human Ancestry.

Boule: Fossil Man.

Morgan: Physical Basis of Heredity.

Baur, Fischer and Lenz: Human Heredity.

Davenport, Todd and Others: Biology of the Individual.

*Paper II.—Advanced Anthropology:*

(Same as in M. A. Final Economics & Sociology.)

### GROUP A.

Two Papers as follows:—

*Paper I.—Field Research Methods:*

*Books recommended:*

Rivers: A Geneological Method of Calculating social and Vital Statistics.

Tylor: On a method of Investigating the Development of Institutions.



Firth: We the Tikopia.

Kardiner & Linton: The Individual and Society.

Kluckhohn & Murray: Personality.

Hunter M: Reaction to Conquest.

Lunt: Social Life of Modern Society.

*Paper II.—Applied Anthropology:*

*Books recommended:*

Hooton: The American Criminal.

Parmelee: Crime.

Elwin: Muria Murder and Suicide.

Krzywicki: Vital Statistics in Primitive Society.

Ambedkar: Untouchables.

Mohinder Singh: Depressed Castes.

Grigson: Challenge of Backwardness.

Furer-Haimendorf: Tribal Hyderabad—Madras  
Report on the Socio-Economic Condi-  
tions of Tribal and Backward People.

Symington Report on Backward Classes, Bombay  
Census Reports, Selected chapters, Vol. 1 (3), 1931.

*GROUP B.*

*Paper I.—Advanced Sociology:*

(Same as in M. A. Final Group B.—Economics  
and Sociology).

*Paper II.—Culture and Civilization:*

(Same as in M. A. Final Group B.—Economics  
and Sociology).



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*GROUP C.*

1. Practical Paper I: (Details to be supplied to the students). Identification of Bones, Sex and Age Determination from the skeleton.

Cranimetry,

Students will be required to measure at least 10 skulls in accordance with the latest technique.

2. Practical Paper II.: (Details to be supplied to the students).

Preservation of Bones, Museum Methods.

Serology, Constitutional Types, Sheldon technique, Finger Prints.

Anthropometry (100 living subjects to be measured and statistically analysed).

There will be a *Viva Voce* for each of the Groups. A Thesis may be offered in lieu of an Optional Paper.

*Books:—Practical:*

Hooton: Up from the Ape (Selected Chapters.)

Wilder: Laboratory Manual of Anthropometry.

Martin: Lehrbuch der Anthropology. (Selected Chapters).

Boyd: Blood Grouping Technique.

Guha: Census Report Vol. I Pt. III (1931).

Mahalanobis, Majumdar & Rao: U. P. Racial Survey Report (1949).

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## ARABIC

B. A. Pass

(GROUP A)

*(For the Examinations of 1952 and after)**Paper I.—Poetry:*

- (1) The Mu'allāqa of 'Amr b. Kulthūm.
- (2) The Hamāsa of Abū Tammām (selected poems).
- (3) The Diwan of Ibnur Rūmi: Isti'tāf.
- (4) The Diwan of al-Mutanabbi: (selected poems).

*Paper II—Prose.*

- (1) The Maqāmāt of Badi-ūz-Zaman:  
The first ten maqāmāt.
- (2) Manfalūti: al Hāwīyah.
- (3) Khalīl Jabrān: Dam'atun wa Ibtisāmatun.

*Paper III.—(a) History of Literature (Outlines only).**Book recommended:*

Gibb: Arabic Literature.

- (b) Unseen passages for translation from  
Arabic into Urdu and *vice-versa*.

B. A. Pass

(GROUP B)

*(For the Examination of 1952)**Paper I.—Prose and Poetry:*

- (1) Majānil-Adab, Vol. I, first 50 pages.
- (2) Poems by A. R. Kāshgharī.
- (3) Thatcher's Arabic Grammar.



*Paper II.—Arab Culture and Civilization—from the Pre-Islamic Period upto the year 750 A. C.*

*Books recommended:*

- (1) تمدن عرب by Le Bon: Tamaddun-i-'Arab.
- (2) A short history of the Saracens by Ameer Ali.  
(Relevant portions only).
- (3) Arab Civilization by Hell. (Relevant portions only).
- (4) History of the Arabs by Hitti. (Relevant portions only).

\*(5) Bernard Lewis: The Arabs in History.

*Paper III.—Arab Culture and Civilization—from 750 to 1258 A. C.*

*Books recommended:*

- (1) Samadi: عهد عباسی ('Ahdi-'Abbási.)
  - (2) Inayatullah: عبرت نامه اندلس 'Ibrat námah-Undlus.
  - (3) Lane-Poole: The Moors in Spain.
  - (4) Lloyd Seton: Twin Rivers.
  - (5) Ameer Ali: A Short History of the Saracens
  - (6) Hitti: History of the Arabs ....
  - (7) Hell: Arab Civilization ....
- } Relevant portions only.

(GROUP B)

(For the Examination of 1953)

*Paper I.—Prose and Poetry.*

- (1) Qira'atur-Rashida: Part IV.
- (2) Diwan of Ali (Selections).

\*For the Examination of 1953.



(3) Thatcher's Arabic Grammar.

*Paper II and III.*—Same as for Papers II and III for 1952

B. A. (Honours)

GROUP A

(For the Examinations of 1952 and after)

There will be *five* Papers as follows:—

*Paper I.*—(a) Poetry (Classical and Modern):

*Books prescribed:*

(1) Noldeke: Delectus (pp. 1—74).

(2) Poems as given in المتحف العربى by Maulvi Al Naqi Naqvi (al-Mathaf al-'Arabi).

(b) Scansion of poems in the following metres:—

الطويل 'البسيط' الكامل 'الوافر' المتقارب  
(Al-Tawil Al-Basit, Al-Wáfir, Al-Kámil, Al-Mutaqárib).

*Paper II*—Prose (Classical and Modern):

*Books prescribed:*

مقدمة الفصل الاول

(1) ابن خلدون

(الفخري الفصل الاول)

(2) ابن الطقطقى

المتحف العربى (جزء الذثر)

(3) اى نقى النقى

(1) Ibn Khaldún Muqaddamah (al-Fasl al-awwal).

(2) Ibn al-Tiqtiqa: al-Fakhri (al-Fasl al-awwal).

(3) Ali Naqi al-Naqvi: al-Mathaf al-Arabi

(Prose portion).

*Paper III.*—History of Arabic Literature:

*Books recommended:*

(1) Nicholson: Literary History of the Arabs.

(2) Haurt: Arabic Literature.



(3) Zaidan: تاريخ آداب اللغة العربية Tàrikh Adàb al-Lughat al-'Arabiah.

(4) Taha Husain: الادب الجاهلى al (Adab al-Jàhili).

(5) Zubaid Ahmad: ادب العرب (Adab al-Arab).

\*(6) al-Iskandari: al Wasit.

*Paper IV.—History of the Arabs:*

*Books recommended:*

(1) Nabih Faris: The Arab Heritage.

(2) Wellhausen: The Arab Kingdom and its Fall.

(3) Mez: The Renaissance of Islam.

(4) Zaidan: تاريخ التمدن الاسلامى (Tàrikh al-Tamad-dun al-Islàmi).

(5) Ahmad Amin: فجر الاسلام (Fajrul Islàm).

(6) Ahmad Amin: ضحى الاسلام (Zuhal Islàm).

*Paper V.—(a) Modern Arabic Prose:*

*Books prescribed:*

دمعة وابتنسامة Khalil Jabràn—Dam'atun wa Ibtisāmatun.

الاجنحة المكسورة (al-Ajnaihat al-Maksurah).

(b) A short Essay in Arabic.

**B. A. Honours.**

**(GROUP B)**

*(For the Examinations of 1952 and after)*

*Paper I.—Poetry:*

(1) Selections from the Diwan of Abul 'Atáhiyah.

†(2) Diwan of Hazrat 'Ali (Anwar-al-Matábi').

(3) Selections from the Diwán of Shauqi.

\*For the Examination of 1953.

†For the Examination of 1953 "Diwan of Hassan bin Thabit" will be substituted.



*Paper II.—Prose :*

- (1) Alf Laila w Laila : The Travels of Sindbad.
- (2) Ibn Muqaffa' : al-Abab-al-Saghir.
- (3) Manfalūti : al-'Abarāt (The Story al-Yatim.)

*Paper III.—Arab Art and Architecture* (Painting, sculpture, music, glazed pottery, tiles, book-binding, embroidery, various styles of Saracenic architecture, Arabic script and calligraphy.)

*Books recommended :*

- (1) Arnold : Painting in Islam.
- (2) Arnold : The Islamic Book.
- (3) Arnold and Guillaume : The Legacy of Islam.
- (4) Cresswell : Early Muslim Architecture.
- (5) Richmond : Muslim Architecture.
- (6) De Rivoira : Muslim Architecture.
- (7) Farmer : Arabian Music.
- (8) Sarre : Islamic Book-binding.
- (9) Butler : Islamic Pottery.
- (10) Nabih Faris : Arabic Script.
- (11) Ziyauddin : Muslim Calligraphy.

*Paper IV.—Cultural Relations of Arabia and India :**Books recommended :*

- (1) Tara Chand : Influence of Islam on Indian Culture.
- (2) Zubaid Ahmad : Contribution of India to Arabic Literature.
- (3) Sulaiman Nadwi : Arab wa Hind ke Ta'alluqat.
- (4) Gibb : Ibn Battuta (Travels in India and Introduction).



*Paper V.—Arab Geography and Commerce.*—(Geography of the Islamic Lands; Arab Geographers and their works; Navigation; Trade routes and Trade centres; Arab Travellers and Explorers):

*Books recommended:*

- (1) Le Strange: Lands of the Eastern Caliphate.
- (2) do. Palestine under the Muslims.
- (3) do. Baghdad during the Abbasid Caliphate.
- (4) Nainar: Arab Geographers' Knowledge of India.
- (5) Arnold: Arab Travellers in the Middle Ages.
- (6) Kramer: Article "Djughrafiya" in the Encyclopædia of Islam (Supplement).
- (7) Sulaiman Nadwi: Arbon ki Jahāzrāni.
- (8) Mez: Renaissance of Islam.

*Paper VI.—Literary History of the Arabs:*

*Books recommended:*

- (1) Nicholson: Literary History of the Arabs.
- (2) Huart: Arabic Literature.
- (3) Zaidan: Tarikhi Ādab-al-Lughat-al 'Arabiya.
- (4) Taha Husain: al-Ādab-al-Jāhili.
- (5) Zubaid Ahmad: Ādab-al-'Arab.



## M. A. Part I

*(For the Examinations of 1952)*There will be *four* Papers as follows:—*Paper I.*—Same as Paper I for the B. A.

Honours (Group A) Examination of 1952.

*Paper II.*—Same as Paper II for the B. A.

Honours (Group A) Examination of 1952.

*Paper III.*—Same as Paper III for the B. A.

Honours (Group A) Examination of 1952.

*Paper IV.*—Same as Paper IV for the B. A.

Honours (Group A) Examination 1952.

## M. A. and M. A. Part II

*(For the Examinations of 1952 and after)*There will be *four* Papers as follows:—*Paper I.—Poetry:**Books prescribed:*

(1) Al-Mu'allaqat al-Sab'a المعلقات السبع

(2) Diwān al-Nābighat al-Dbuhyānī ديوان النابغة الذبياني

(2) Diwān al-Nābighat al-Dbuhyānī.

*Paper II.—Prose:**Books prescribed:*

(1) الكامل للمبرد باب الخوارج

(1) Al-Kāmil of Mubarrad. Bāb-al-Khawrij,

(Egyptian Ed. 1324 A. H. pp. 119—173).

(2) مختار العقدس ٩٩—١ (قاهرة)

(2) Mukhtār al-'Iqd pp. 1—99 (Cairo).



*Paper III.—(a) Prosody:**Books prescribed:*

Von Dyke: Muhit al-Dàirah. فان دأرك: محيط الدائرة

*(b) Literary Criticism:**Books prescribed:*

قداميه بن جعفر: نقد الشعر

Qudàmah bin Jà'far: Naqd al-Shi'r

*(c) Rhetorics:**Books prescribed:*

Talkhìs al-Miftàh.

تلخيص المفتاح

*Paper IV.—Essay in Arabic.*

*Note.*—A thesis on a subject connected with Arabic language or literature may be submitted instead.



## ISLAMIC CULTURE AND CIVILIZATION

### M.A. Part I.

*(For the Examinations of 1952 and after)*

There will be *four* Papers as follows:—

- Paper I.*—Same as Paper III for the B. A. Honours Arabic (Group B) Examination.
- Paper II.*—Same as Paper IV for the B. A. Honours Arabic (Group B) Examination.
- Paper III.*—Same as Paper V for the B. A. Honours Arabic (Group B) Examination.
- Paper IV.*—Same as Paper VI for the B. A. Honours Arabic (Group B) Examination.

### M.A. and M.A. Part II.

*(For the Examinations of 1952 and after)*

There will be *four* Papers as follows:—

- Paper I.*—*Islamic States from the Fall of Bagdad upto the Present Times:*

(Cultural History with outlines of Political History),  
*Books recommended:*

- (1) Sykes: History of Persia, 2 Vols.
- (2) Sykes: Afghanistan. „
- (3) Mayer: Afghanistan.
- (4) Longrigg: Four Centuries of Modern Iraq.
- (5) Browne: Persian Revolution.
- (6) Browne: Lit. History of Persia, Vols. 3 and 4.



- (7) Bartold: Tukestan.
- (8) Kohn: History of Nationalism in the East.
- (9) Ishaque: Modern Persian Poetry.
- (10) Browne: Press and Poetry of Modern Persia.
- (11) Ency. of Islam: (relevant portions).
- (12) Browne: A Year amongst the Persians.

اصول فقہ و اصول حدیث و اصول تفسیر

Usúl i Fiqh wa Usúli Hadis wa Usúl Tfasír.

- (13) Lane-Poole: Turkey.
- (14) Witteck: The Rise of the Ottoman Empire.
- (15) Luke: The Making of Modern Turkey.
- (16) Halide Adib: Turkey Faces West.

*Paper II.—Development of Islamic Theology:*

*Books recommended:*

- (1) MacDonald: Development of Muslim Theology.
- (2) Wensinck: The Muslim Creed.
- (3) Hurgronje: Mohammadanism.
- (4) Fyzee: An Introduction to the Study of Mohammadan Law.
- (5) Guillaume: Traditions of Islam.
- (6) Taylor: History of Mohammadanism and its Sects.
- (7) Iqbal: Reconstruction of Religious Thought in Islam.

(8) عبد السلام ندوی: تاریخ فقہ اسلامی

Abdus Salàm Nadwí: Tarikh Fiqhi Islami.

*Paper III.—Islamic Philosophy and Mysticism:*

*Books recommended:*

- (1) De Boer: History of Philosophy in Islam.



- (2) Nicholson: Studies in Islamic Mysticism.
- (3) Smith: Al-Ghazzali—The Mystic.
- (4) Arberry: Doctrine of the Sufīs.
- (5) Iqbal: Development of Metaphysics in Persia.
- (6) O'Leary: Arabic Thought and its Place in History.
- (7) Carra de Vaux: Penseurs Des 'I' Islam Vol. 4, Chaps 1—5.
- (8) Nicholson: Mystics of Islam.
- (9) شبلى — الكلام (Shiblī: al-Kalām.)
- (10) شبلى — علم الكلام (Shiblī 'Ilm al-Kalām.)

*Paper IV.*—Islamic Political Thought and Institutions.

*Books recommended:*

- (1) MacDonald: Development of Muslim Theology, Jurisprudence, and Constitutional History.
- (2) Roberts: Social Laws of the Koran.
- (3) Levy: Sociology of Islam, 2 Vols.
- (4) Lammens: Islamic Beliefs and Institutions.
- (5) Arnold: The Caliphate.
- (6) Tritton: The Caliphs and their Non-Muslim Subjects.
- (7) Hameed Ullah: Muslim Conduct of State.
- (8) Khuda Bakhsh: Politics in Islam.
- (9) Amedroz: R. A. S. Journal—(Reprint of the article of Māwardī).

**NOTE:**—Thesis on a subject connected with the study of Islamic Culture and Civilization may be offered in place of Paper II, III or IV.

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**PERSIAN****B.A. Pass.**

(For the Examinations of 1952 and after)

There will be *three* Papers as follows:—

*Paper I.—*

(1) Gulha-i-Bahar by Dr. Ghulam Sarwar (Educational Book House, Aligarh).

Or

\*Adabiyat-i-Muasir by Rashid Yasmi.

(2) Shera—(Kitabistan, Allahabad).

(a) Qasidas: Urfi, Qa'ani.

(b) Ghazals: Hafiz, Amir Khusrau, Urfi, Kalim Saib, \*Iraqi.

(c) Mathnawis: Firdausi, Nizami, Amir Khusrau, Rumi.

(3) Falsafa-i-Khyyam by S. M. B. Shams.

(4) An Outline of the History of Persian Literature.

*Books recommended:*

Persian Literature by Levy.

Outline History of Persian Literature by A. H. Faridi.

Sanadid-i-Ajam by M. H. Nasiri.

\*Maasir-i-Ajam by Junaidi.

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\*For the Examinations of 1953 and after.



*Paper II.—*

(1) Akhlaq-i-Muhsini (First seventeen Chapters).

(2) Narsa pages 1—12, 32—46, 91—103, 118—134, 164—171.

\*(2) Nasra—Selections from the Tarikh-i-Tabari; Siyasatnama; Tarikh-i-Jahan Kusha; Habib-us-Siyar; Akbarnama; Ain-i-Akbari.

(3) Rahbar-i-Nizhad-i-Nau (Ram Narain Lal, Allahabad), First 62 pages.

(4) Translation from Urdu or English into Persian.

*Paper III.—Composition and Rapid Reading.**Books recommended for Composition:*

1. Insha-i-Jafari by A. H. Jafari

2. Farhang-i-Amsal by M. H. Rizavi.

*Books prescribed for Rapid Reading:*

1. Nama-i-Khusrawan (upto the end of the Sassanian period).

2. Rahbar-i-Nizhad-Nau (Guftar-i-haftum).

**B. A. Honours,**

(For the Examinations of 1952 and after)

There will be *five* Papers as follows:—

*Paper I.—*

A prescribed course in one of the following specialised subjects:—

(a) General Literature.

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\*For the Examinations of 1953 and after.



\*(b) Sufistic Literature.

\*(c) Historical Literature.

*Books prescribed:*

(a) General Literature.

(1) Chahar Maqala (N. K. Press edition) omitting pages 26-28, 43-46 and 60-65.

(2) Akhlaq-i-Nasiri:

Maqala I, Qism I, Fasls I, 2, 3, and 5.

Maqala I, Qism 2, Fasls 1, 3, 4 and 5.

(3) Tauqiat-i-Kisra (omitting translator's explanations).

(4) Huma by Mir Mohammad Hijazi.

(b) Sufistic Literature.

(1) Tazkirat-ul-Awliya, edited by A. W. Qazwini (Vol. I first half).

(2) Kashf-ul-Mahjub (al-hijab-ut-tasi).

(3) Kimiya-i-Saadat (rukn-i-chaharum).

(4) Lawaih-i-Jami.

(5) Mystics of Islam by R. A. Nicholson.

(c) Historical Literature.

(1) Balami's Tarikh-i-Tabari (Vol. III, pages 281-310, Vol. IV, pages 369-434).

(2) Tarikh-i-Ferishta (Ghaznawi dynasty).

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\*These options are not allowed for the present.



- (3) Tarikh-i-Firuz Shahi (Exodus of the Mughals).
- (4) Ruqaat-i-Alamgir, Edited by Najib Ashraf.
- (5) Iqbal Nama-i-Jahangiri.

*Paper II.—*

- (1) Ghazaliyyat-i-Saadi (Taiyyibat) First 50 Ghazals.

- (2) (a) Qasaid-i-Khaqani:

- (۱) هر صبح سربه گلشن سودا بر آوردم
- (۲) صبح دم چون کله بندد آه دود آسائے من
- (۳) سنت عشاق چیست برگ عدم ساختن
- (۴) جوشن صورت بروں کن در صف مردان در آ

- (b) Qasaid-i-Unsuri (N. K. Press).

- (۱) سدا جشن ملوک نامدار است
- (۲) تاهمی جولان زلفش گرد لا لستان بود
- (۳) چنین نماید شمشیر خسرواں آثار
- (۴) جمال لفظ فزائے و کمال معنی گیر

- (3) Mantiq-ut-Tayr

سوال مرغ دیگر در مسافت راه وادی طالب  
from to the end of the book-

- (4) Rhetorics.

*Books recommended:*

- (1) Hadaiq-ul-Balaghat.
- (2) Maani-o-Bayan by Mohammad Rafi Siddiqi (Ram Dayal Agarwala, Allahabad).
- (3) Dabir-i-Ajam by A. A. Ruhi.



*Paper III.*—History of Persian Literature of the Pre-Mongol Period.

*Books recommended:*

(1) Browne: Literary History of Persia, Volumes I and II.

(2) Shibli: Sher-ul-Ajam, Volumes I and V.

(3) Mahmud Shirani: Tanqid-i-Sher-ul-Ajam.

(4) Mahmud Shirani: Firdausi par Char Maqale.

*Paper IV.*—(1) History of Persia.

(2) An Essay in Persian on some subject connected with the History of Persian Literature.

*Books recommended for History of Persia:*

(1) Sykès: Persia (Pre-Islamic Period).

(2) Sykes: History of Persia—Volume II.

(3) Hasan Pirniya: Iran-i-Bastan.

(4) E. D. Ross: Persia.

*Paper V.*—

Special study of Jami or Umar Khayyam.

Or

Special study of the Twentieth Century Persian Literature.

*Books recommended:*

(1) Sukhanwaran-i-Iran dar Asr-i-Hazir.

(2) Shuara-i-Ahd-i-Pahlawi.



- (3) Yaki Bud wa Yaki Nabud.
- (4) Rashid Yasmi: Tarikh-i-Adabiyyat-Iran.
- (5) Bahar Mashhadi: Sabk Shinasi dar Iran.
- (6) Nukhustin Kangre-i-Nawisindagan-i-Iran.
- (7) E. G. Browne: Persian Revolution.

### M. A. Part I.

*(For the Examinations of 1952 and after)*

There will be *four* Papers and the students shall be expected to choose *one* of the following subjects:—

- (a) General Literature.
- (b) Sufistic Literature.
- (c) Historical Literature.

*Paper I.—*

(Same as Paper I for B. A. Honours).

*Paper II.—*

(Same as Paper II for B. A. Honours).

*Paper III.—*

(Same as Paper III for B. A. Honours).

*Paper IV.—*

(Same as Paper IV for B. A. Honours).

### M. A. and M. A. Part II.

*(For the Examinations of 1952 and after)*

The candidates shall continue their study of the particular subject that they choose for M. A. Part I or for the Honours Degree.



## (a) General Literature.

*Paper I.—Prose.*

(1). Waqai-i-Nimat Khan-i-Ali

وقائع هفتد هم رجب و شب چهاردهم شعبان و بیست و یکم شعبان

(2) Shi Nasr-i-Zuhuri (Nasr-i-Awwal).

(3) Tuhfa-i-Sami edited by Dr. Iqbal Husain.

(4) Bist Maqala-i-Qazwini (Part I).

*Paper II.—Poetry (1) Qasaid-i-Urfi.*

(۱) اے مرتفع زنسبت ذات تو شان علم

(۲) عادت عشاق چیست مجلس غم داشتن

(۳) صباح عید کہ در تکیہ گاہ ناز و نعیم

(۴) زخود گردیده بر بندی چه گویم کام جان بینی

(۵) هر سوخته جانے کہ به کشمیر در آید

(2) Diwan-i-Hafiz—(N. K. Press, Lucknow)

First 20 Ghazals from

ردیف تا and first 15 Ghazals

from دال ردیف and first 15

Ghazals from ردیف یا

(3) Shahnama-i-Firdausi.

داستان بیژن با منیژه

from

شبه چون شبه روئے شسته بقیر—نه بهرام پیدا نه کیوان نه تیر

to

تمامی بگفتم من این داستان—بدان سان که بشنیدم از داستان



## (4) Yusuf-o-Zulaikha by Jami.

from داستان شمع جمال یوسفی رادر شبستان غیب افروختن  
to the end of the book, omitting  
the following portion:—

From the beginning of—

رفتن زلیخا پیش یوسف و تضرع نمودن و عذر کردن یوسف  
to the end of—

دریافتن عزیز یوسف دابرون خانه و افشای راز کردن زلیخا

*Paper III.*—History of Persian Literature from the  
Mongol Period to the Modern Times.

*Books recommended:*

(1) Browne: Literary History of Persia,  
Volumes III and IV.

(2) Browne: Prose and Poetry of Modern  
Persia.

(3) Shibli: Sher-ul-Ajam, Volumes II, III  
and IV.

*Paper IV.*—

An Essay in Persian on some subject connected  
with Persian Literature or Civilization.

Or

A Thesis on a subject approved by the Head of  
the Department.



**URDU.****B.A. Pass.***(For the Examination 1952)*

There will be *three* Papers as follows:—

*Paper I.—Prose and a short essay on a subject connected with the History of Urdu Literature.*

*Prose :*

- (1) Sher-o-Shairi by Hali.
- (2) Nairang-i-Khayal Part I by Azad.
- (3) Ud-i-Hindi (Letters addressed to Majruh, Mehr, Shafaq and Bekhabar).
- (4) Hamari Shairi by M. H. Rizavi (4th Edition).
- (5) Mazamin-i-Farhat:

نزیں احمد کی کہانی—دہلی کا ایک یادگار مشاعرہ

- (6) Waridat by Prem Chand.

*History of Literature:*

*Books recommended:*

- (1) Tarikh-i-Nazm-o-Nasr-i-Urdu by S. M. Baqar.
- (2) Mukhtasar Tarikh-i-Adab-i-Urdu by Dr. Ejaz Husain.
- (3) Urdu Literature by G. Bailey.
- (4) Intikhab-i-Khutbat-i-Mushran.
- (5) Khamsa-i-Kaifi by Pt. B. D. Kaifi.



*Paper II.—Poetry, Rhetorics and Translation.*

*Poetry (Classical):*

(1) Majnua-i-Qasaid wa Ghazaliyat.

(Published by the Shining Book Depot, Lucknow.)

(2) Kulliyat-i-Mir—First 30 ghazals.

(3) Ghazaliyat-i-Mumin.

اثر اس کو ذرا نہیں ہو تا

غیروں پہ کھل نہ جائے کہیں (از دیکھنا

دل آک ہے اور لگاؤں گے ہم

جلتا ہوں ہجو شاہد و یاد شراب میں

وہ جو ہم میں تم میں قرا تھا تمہیں یاد ہو کہ نہ یاد ہو

التے وہ شکوے کرتے ہیں اور کس ادا کے ساتھ

سینہ کو بی سے زمیں سا ری ہلا کے اُٹھے

دفن جب خاک میں ہم سوختہ ساماں ہوں گے

صبر وحشت اثر نہ ہو جائے

اگر غفلت سے باز آیا جفا کی

(4) Marasi-i-Anis.

نمک خوان تکلم ہے فصاحت میری

جب قطع کی مسافت شب آفتاب نے



*Poetry (Modern):*

(1) Iqbal's poems:

شمع و شاعر—تصویر درد—خضر دہلوی

(2) Kulliyat-i-Akbar (Part I).

*Rhetorics:*

Bayan and Badi (بیان اور بدیع)

*Book recommended:*

Tashil-ul-Balaghat by Sajjad Mirza Beg.

*Paper III.—(a) Persian Prose and Poetry (for the students who do not offer Persian as one of their optional subjects).*

(1) Gulistan-i-Sadi (Chapters I and VII).

(2) Ghazaliyat-i-Hafiz.

(Published by the Shining Book Depot,  
Lucknow.)

Or

(b) *Linguistics (for students offering Persian as one of their optional subjects.)*

*Books recommended:*

(1) Beams: Outline of Indian Philology.

(Translated into Urdu by Ehtesham Husain.)

(2) Grierson: Linguistic Survey of India, Vol. IX  
Part I.

(3) Dr. S. M. Qadri "Zor"; Hindustani Lisaniyat.



**B. A. Pass.**

(For the Examinations 1953 and after)

[There will be *three* Papers as follows:—

*Paper I.—Prose and a short essay on a subject connected with the History of Urdu Literature.*

*Prose:*

- (1) Shir-o-Shairi by Hali.
- (2) Nairang-i-Khyal, Vol. I by Azad.
- (3) Ud-i-Hindi (Letters addressed to Majruh, Mehr, Shafaq and Bekhabar).
- (4) Hamari Shairi by M. H. Rizavi (4th Edition).
- (5) Mazamin-i-Farhat:  
نزیر احمد کی کہانی—دہلی کا ایک یادگار مشاعرہ
- (6) Waridat by Prem Chand.

*History of Literature:**Books recommended:*

- (1) Tarikh-i-Nazm-o-Nasr-i-Urdu by S. M. Baqar.
- (2) Mukhtasar Tarikh-i-Adab-i-Urdu by Dr. Ejaz Husain.
- (3) Urdu Literature by G. Bailey.
- (4) Intikhab-i-Khutbat-i-Mushran.
- (5) Khamsa-i-Kaifi by Pt. B. D. Kaifi.



*Paper II.—Poetry, Rhetorics and Translation.*

*Poetry (Classical):*

(1) Majmua-i-Qasaid wa Ghazaliyat.

(Published by the Shining Book Depot, Lucknow)

(2) Kuliyat-i-Mir—First 30 ghazals.

(3) Ghazaliyat-i-Momin.

۱—اثر اس کو ذرا نہیں ہوتا

۲—غیروں پہ کھل نہ جائے کہیں داز دیکھنا

۳—دل آگ ہے اور لگاؤں گے ہم

۴—جلتہا ہوں ہجر شاہدو یاد شراب میں

۵—وہ جو ہم میں تم میں قرار تھا تمہیں یاد ہو کہ نہ یاد ہو

۶—الئے وہ شکوے کرتے ہیں اور کس ادا کے ساتھ

۷—سینہ کوبی سے زمیں ساری ہلاک اُٹھے

۸—دفن جب خاک میں ہم سوختہ ساماں ہوں گے

۹—صبر وحشت اثر نہ ہو جائے

۱۰—اگر غفلت سے باز آیا جفا کی

(4) Marasi-i-Anis.

نمک خوان تکلم ہے فصاحت میری

جب قطع کی مسافت شب آفتاب نے



*Poetry (Modern):*

(1) Iqbal's poems :

شمع و شاعر — تصویر درد — خضر راہ

(2) *Kulliyat-i-Akbar* (Part I).*Rhetorics:*

Bayan and Badi (بیان اور بدیع)

*Book recommended:**Tahsilul-Balaghat* by Sajjad Mirza Beg.*Paper III.—(a) Persian Prose and Poetry (for the students who do not offer Persian as one of their optional subjects).*(1) *Gulistan-i-Sadi* (Chapters I and VII).(2) *Ghazaliyat-i-Hafiz*.

(Published by the Shining Book Depot, Lucknow)

Or

(b) *Linguistics (for students offering Persian as one of their optional subjects).**Syllabus for Linguistics:—*

The meaning and scope of the science of language; language, its nature and origin; the development of language; change in sound and change in meaning; the types of language; classification of languages; Indo-Aryan and the three stages of its development; Origin of Hindustani and its early growth; Hindustani in Northern India, the Deccan and Gujerat; later development; Non-Aryan languages of India; Present position of Hindustani.

*Books recommended:*(1) Beams: *Outline of Indian Philology*.

(Translated into Urdu by Ehtesham Husain.)

(2) Grierson: *Linguistic Survey of India*, Vol. IX Part I.(3) Dr. S. M. Qadri "Zor": *Hindustani Lisniyata*.



**B.A. Honours.**

(For the Examinations of 1952 and after)

There will be five Papers as follows:—

*Books prescribed:*

*Paper I.—Later Prose:*

(1) Azad: Ab-i-Hayat—

(زبان اُردو کی تاریخ اور 'نظم اُردو کی تاریخ')

(2) Hali: Yadgar-i-Ghalib (Excluding chapter on Persian Prose and Persian Poetry).

(3) Shibli: Maqalat Part II.

(4) Prem Chand: Gau Dan.

(5) Mirza Ruswa: Umrao Jan Ada.

(6) Dr. Abdul Haq: Chand Hamasr.

(7) Dr. Abid Husain:

Mazamin-i-Abid (First eight mazamin.)

*Paper II.—Later Poetry:*

*Books prescribed:*

(1) Atash: Diwan-i-Duwum.

(2) Diwn-i-Ghalib (دیف)

(3) Ghulzar-i-Nasim.

(4) Marasi-i-Anis:

بہ خدا فارس میدان تہور تھا حر  
جب دن میں سر بلند علی کا علم ہوا  
کیا غازیان فوج خدا نام کر گئے



(5) Iqbal: **Bal-i-Jibril** (Second half).

(6) Chakbast: **Subh-i-Watan**.

(7) Josh: **Saif-o-Sabu**.

*Paper III.—*

(a) History of Urdu Literature.

(b) An Outline of the History of Hindi Literature.

*Books recommended:*

(a) (1) Azad: **Ab-i-Hayat**.

(2) R. B. Saksena: **Tarikh-i-Abad-i-Urdu**.  
(Urdu Edition).

(3) S. U. Qadri: **Tarikh-i-Urdu-i-Qadim**

(4) Garcin de Tassy: **Tamhidi Khutbat**.

(5) Hamid Hasan Qadri: **Dastan-i-Tarikh-i-Urdu**.

(b) (1) Keay: **Hindi Literature**.

(2) Inder Nath Madan: **Modern Hindi Literature**.

*Paper IV.—Early Prose and Poetry:*

*Books prescribed:*

*Prose:*

(1) Wajhi: **Sab Ras** (First 100 pages).

(2) Mir Amman: **Bagh-o-Bahar** (Anjuman  
edition.)

(3) Surur: **Fasana-i-Ajaib**.



*Poetry:*

Kulliyat-i-Wali (ردیف ی)

(2) Mir: Diwan-i Awwal.

(3) Mir Hasan: Sihr-ul-Bayan.

(4) Sauda:

(۱) ہے چرخ جب سے ابلق ایام پر سوار

(۲) اب سامنے میرے جو کوئی پیرو جوان ہے

(۳) کہا میں آج یہ سودا سے کیوں تو دانوا دل

(5) Diwan-i-Faiz Dehlawi.

*Paper V.—*

Special study of Urdu Mathnawi with special reference to the following:—

Qutb Mushtari; Bostan-i-Khayal; Darya-i-Ishq; Khab-o-Khayal (Mir); Khab-o-Khayal (Asar); Sihr-ul-Bayan; Gulzar-i-Nasim; Tilism-i-Ulfat; Zahr-i-Ishq; Charagh-i-Kaba; Hubb-i-Watan; Shab-i-Qadr.

**M. A. Part I.**

*(For the Examinations of 1952 and after)*

There will be *four* Papers as follows:—

*Paper I—*

(Same as Paper I for B.A. Honours).

*Paper II.—*

(Same as Paper II for B.A. Honours).

*Paper III.—*

(Same as Paper III for B.A. Honours).

*Paper. IV.—*

(Same as Paper IV for B.A. Honours).



**M.A. and M.A. Part II.**

*(For the Examinations of 1952 and after)*

There will be *four* Papers as follows:—

*Paper I.—*

- (a) Linguistics.
- (b) Hindi Language.

(a) Syllabus for Linguistics:—

The meaning, scope and importance of the science of language; history of the science; Origin and development of language; Child and language; Causes of the change in language; Phonetic changes; Semantic changes; Morphology and word-formation; language and dialect; Social and historical back round of the formation and growth of language; principles of classification and the families of language.

Aryan, Indo-European and Indo-Aryan; Stages of the development of Indo-Aryan; Various theories of the origin of Hindustani; Development of Hindustani in the Doab, the Deccan, Gujerat, Delhi and Lucknow; Principal Indian languages of modern India, and the dialects of Western and Eastern Hindi; Non-Aryan languages of India; Short history of script with special reference to Urdu script.

(a) *Books recommended for Linguistics:*

- (1) Azad: Sukhandan-i-Fars, Parts I and II Lecture 2.
- (2) Bloomfield: Language.
- (3) Jespersen: Language—its Nature, Development and Origin.
- (4) Beams: Comparative Grammar of Modern Aryan Languages of India.



- (5) S. K. Chatterji: Indo-Aryan and Hindi.
- (6) Jahagirdar: Indo-Aryan Languages.
- (7) Mahmud Sherani: Panjab men Urdu.
- (8) Masud H. Khan: Tarikh-i-Zaban-i-Urdu.
- (2) Dr. D. Diringer: The Alphabet.

(b) *Books prescribed for Hindi Language:*  
Prem Chand: Sapta Saroj.

*Paper II.—*

Special study of an author.

The author approved for the examination of 1952:  
Ghalib and his Age.

Or

A Thesis on a subject approved by the Head of the Department.

*Paper III.—*

Principles of Literary Criticism.

Syllabus for Principles of Literary Criticism:—

- (1) Relationship of literature and criticism; Canons of Greek criticism; Short History of Western criticism; Classicism and Romanticism; Symbolism; Principles of æsthetic, psychological and Marxist criticism.
- (2) Criticism in Tazkiras with special reference to Mir, Mir Hasan, Shefta and Azad.
- (3) Development of Urdu criticism from Hali to the present day.
- (4) Poetry and kinds of poetry; detailed study of ghazal, qasida, masnavi and Marsia.



- (5) Forms of prose; difference in prose and poetry; special study of novel, biography, short story and drama.

*Books recommended:*

- (1) Aristotle: 'Poetics'.
- (2) Hudson: Introduction to the study of Literature.
- (3) Scott-James: The Making of Literature.
- (4) Richards: Principles of Criticism.
- (5) Mir: Nikat-ush-Shuara.
- (6) Shibli: Shir-ul-Ajam (Vol. IV, Ch. I).
- (7) Abdul Huq: Muqaddimat (Part II).
- (8) Niaz Fatehpuri: Intiqadiyat.
- (9) A. S. Majnun: Adab aur Zindaqi.
- (10) A. A. Suroor: Nae aur Purane Charagh.
- (11) S. Ehtesham Husain: Tanqidi Jaize.

*Paper IV.—Persian Literature:*

*Books prescribed:*

- (1) Naziri: Diwan (First twenty Ghazals).
- (2) Urfi: هر سوخته جانے کہ بہ کشمیر در آید  
صبح آید کہ در تکیہ گاہ ناز و نعیم
- (3) M. B. Shams: Falsafa-i-Khaiyyam.
- (4) Kashifi: Akhlaq-i-Muhsine (باب چہام)
- (5) Mir: Faez-i-Mir.



**SANSKRIT****B. A. Pass.***(For the Examination of 1952)*There shall be *three* papers as follows:—**Paper I—**

Poetry, Alankāra and Grammar.

**Books:**

- (1) Śiśupālavadha—III
- (2) Kirātārjunīyam—I and II.
- (3) Sāhitya-darpana—Chapter 10 (arthālaṅkāras only, omitting the sub-divisions.)
- (4) The Mahabharata condensed in the poet's own words (G. A. Natesan & Co., Madras) for non-detailed study.
- (5) Laghukaumudi (upto ajanta-napumsaka linga).

**Paper II.—**

Prose, Drama and Composition.

**Books:**

- (1) Kādambarī (Kathāmukha).
- (2) Mudrārākshasa.

**Books recommended for Composition:**

- (1) Bhandarkar: Second Book of Sanskrit.
- (2) Kale: Higher Sanskrit Grammar.
- (3) Apte: Guide to Sanskrit Composition.



*Paper III.—*

## Sanskrit Culture and Civilisation.

Indian culture centering round dharma, artha, Kama and moksha; assimilation of foreign elements and expansion to foreign countries; main ideas and institutions relating to family and social life; Government and polity; play and recreation, Intellectual and spiritual life.

## History of Sanskrit Literature.

Value and importance of the study of Sanskrit literature; Sanskrit literature and its different branches with special emphasis on the classical period; predecessors of Kalidasa, Kalidasa and the post-Kalidasa poets upto 1200 A. D. Sanskrit prose and the representative prose-writers.

*Books recommended :*

- (1) Keith: Classical Sanskrit Literature.
- (2) शिवदत्त शर्मा—भारतीय संस्कृति
- (3) बलदेव उपाध्याय—संस्कृत साहित्य का इतिहास ।

## B. A. Pass.

(For the Examinations of 1953 and after)

There shall be *three* papers as follows:—

*Paper I.—*

Poetry, Alankāra and Grammar.

*Books:*

- (1) Śisupālavadha—III.
- (2) Kirātārjunīyam—I and II.



(3) Vāgbhatālaṅkara—Chapters IV and V (excluding Shabdalaṅkāras).

(4) The Mahabharata condensed in the poet's own words (G. A. Natesan & Co., Madras) for non-detailed study.

(5) Laghukaumudi (upto ajanta-napumsaka linga).

*Paper II.—*

Prose, Drama and Composition.

*Books:*

(1) Kādambarī (Kathāmukha.)

(2) Abhijñāna Śākuntalam.

*Books recommended for Composition:*

(1) Bhandarkar: Second Book of Sanskrit.

(2) Kale: Higher Sanskrit Grammar.

(3) Apte: Guide to Sanskrit Composition.

*Paper III.—*

Sanskrit Culture and Civilisation.

Indian culture centering round dharma, artha, Kama and moksha; assimilation of foreign elements and expansion to foreign countries: main ideas and institutions relating to family and social life; Government and polity; play and recreation, Intellectual and spiritual life.

History of Sanskrit Literature.

Value and Importance of the study of Sanskrit literature; Sanskrit literature and its different branches with special emphasis



on the classical period; predecessors of Kalidasa, Kalidasa and the post-Kalidasa poets upto 1200 A. D. Sanskrit prose and the representative prose-writers.

*Books recommended:*

- (1) P. K. Acharya: Elements of Hindu Culture and Sanskrit Civilisation. (Glories of India—Indian Culture and Civilisation).
- (2) Shivadatta Jnani: Bharatiya Sanskriti.
- (3) Keith: Classical Sanskrit Literature.
- (4) Baladeva Upadhyaya: Sanskrit Sahitya ka Itihasa.

**B. A. Honours.**

*(For the Examinations of 1952 and after)*

There will be *five* papers, of which *two* shall be compulsory and the remaining optional.

*Compulsory Papers.*

*Paper I.—Linguistics and Grammar:*

*Linguistics:—*

The linguist's point of view in the study of a language. Speech sounds and their classification. Difference between phonetics and phonology: grammatical categories and how they are expressed in the different languages. Change in language, phonetic, morphological and semantic. Phonetic laws. Evolution of the Prakrits from Sanskrit; principles of language classification; families of languages, those found in India; History of Linguistic Science.



The above syllabus is to be studied as covered by the following books:—

- (1) Baburam Saksena: Samanya Bhasha Vijnana.
- (2) Palmer: Introduction to Linguistics.

*Books recommended:*

- (1) Gune: Introduction to Comparative Philology.
- (2) Vendryes: Language.
- (3) Graaf: Language and Languages.
- (4) Jespersen: Language, its nature, origin and development.

*Grammar.*

*Book prescribed:*

*Laghukaumudi:*

Halantapullinga, strilinga and napumsaka linga, bhvadi, atmanepada, parasmaipada, vibhaktyartha, samasa.

*Paper II.—Literary and Cultural History of India:*

(A) Vedic literature and its main trends; the offshoots of Vedic literature, the Vedangas, a general survey; the Rāmāyana, the Mahabharata and Puranas, their literary tendencies and their influence on later Sanskrit literature; the emergence of classical Sanskrit literature and its causes.

(B) Social culture in the Vedic and the post-vedic period upto A.D. 650; ancient Indian political institutions in a brief historical survey; culture of fine arts in ancient India upto A.D. 650 with special reference to the arts of architecture, painting and sculpture.



(C) Fundamentals of Indian Philosophy:

Conception of Self.

Nature of the objective world.

Theory of knowledge.

Doctrine of final emancipation.

(In the light of Buddhism, Sankhya and Vedanta).

*Books recommended:*

(1) Winternitz: History of Indian Literature, Volume 1.

(2) Masson Oursel and Willman Grabowska: Ancient India and Indian Civilisation.

(3) P. K. Acharya: Hindu Architecture in India and Abroad, Volume VI of the Manasara series.

(4) Keith: History of Sanskrit Literature.

(5) Percy Brown: Indian Painting.

(6) J. Ph. Vogel: Buddhist Art.

(7) Hiriyanna: The Essentials of Indian Philosophy.

For the remaining *three* papers, the student shall make a selection out of the following optional papers:—

*Paper III.—Veda and Vedic Exegesis:*

Veda and Avesta: the contribution of Yaska to Vedic studies; the pre-Sayana commentators on the Vedas,



Vedic studies in modern times; the formation of Vedic literature; Vedic gods, general conception and particular gods; Vedic ritual, general characteristics; the age of the Vedas.

*Books prescribed:*

Selections from the *Rig Veda* by Peterson B. S. S. 36 (Nos. 1, 2, 3, 4, 5, 6, 7, 10, 12, 13, 14, 19, 24, 29, 30 and 33).

*Books recommended:*

- (1) \*MacDonell: Vedic Grammar for students.
- (2) \*Ghate's Lectures on Rig Veda.
- (3) \*Laghupaniniyam, Pt. II.
- (4) \*Oldenberg: Religion of the Vedas.
- (5) \*Keith: Religion and Philosophy of the Vedas.

*Paper IV.—Kavya and Sahitya:*

*Books prescribed:*

Naisadhiyacaritam I.

Kavyaprakasha, Ullasa, I—V and X (up to Dipaka only).

Chhandahsutra of Pingala.

Sutras relating to the basis of classification of the metres and the following meters.

अनुष्टुप्, इन्द्रवज्रा, उपेन्द्रवज्रा, मालिनी, पुष्पिताग्रा, शिखरिणी, शार्दूलविक्रीडित, वसन्ततिलका, स्रग्धरा, आर्या, मन्दाक्रान्ता, वंशस्थ, द्रुतविलम्बित, दोधक, वैतालीय, रथोद्धता, तोटक ।

\*Books marked with an asterisk are those recommended for consultation only.



*Books recommended:*

- (1) \*S. K. De and S. N. Das Gupta: History of Sanskrit Literature: Classical Period.
- (2) \*Keith: History of Sanskrit Literature.
- (3) \*K. C. Pandey: Comparative Aesthetics, Vol. I, Indian Aesthetics.

*Paper V.—Pali and Prakrit:**Books prescribed:*

- (1) Karpuramanjari.
- (2) M. M. Vidu Shekhar Bhattacharya—Buddhist Texts (Calcutta University).
- (3) Khuddakapatha.

*Books recommended:*

- (1) \*Woolner: Introduction to Prakrit.
- (2) \*Geiger: Pali Language and Literature.

*Paper VI.—Philosophy:**Books prescribed:*

Tarkasangraha:

Sankhyakarika with Tattvakaumudi.

*Books recommended:*

- (1) \*J. C. Chatterji: Hindu Realism.
- (2) \*Hiriyanna—Outline of Indian Philosophy (Chapters on Nyaya Vaiseshika and Samkhya).

\*Books marked with an asterisk are those recommended for consultation only.



*Paper VII.—Dharmashastra:**Books prescribed:*

Manusmriti: I—V.

Yajnavalkya: Vyavaharadhyaya.

*Books recommended:*

(1) \*Kane: History of Dharmashatra 1.

(2) \*Jolly: Hindu Law and Custom.

(3) \*K. V. Rangaswami Aiyangar: Aspects of the Social and Political System of Manusmriti.

**M.A. Part I.***(For the Examinations of 1952 and after)*

There will be *four* papers, two of which will be compulsory and the other two optional.

*Compulsory Papers.**Paper I.—Linguistics and Grammar:**Linguistics:*

The linguist's point of view in the study of a language. Speech sounds and their classification; difference between phonetics and phonology; grammatical categories and how they are expressed in the different languages; change in language, phonetic, morphological and semantic. Phonetic laws. Evolution of the Prakrits from Sanskrit; principles of language classification;

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\*Books marked with an asterisk are those recommended for consultation only.



families of languages; those found in India; History of Linguistic Science.

The above syllabus is to be studied as covered by the following books.

- (1) Baburam Saksena: Samanya Bhasha Vijnana.
- (2) Palmer: Introduction to Linguistics.

*Books recommended:*

- (1) Gune: Introduction to Comparative Philology.
- (2) Vendryes: Language.
- (3) Graaf: Language and Languages.
- (4) Jespersen: Language, its nature, origin and development.

Grammar.

*Book prescribed:*

*Laghukaumudi:*

Halantapulinga, strilinga and napumsaka linga,  
bhvadi, atmanepada, parasmaipada,  
vibhaktyartha, samasa.

*Paper II.—Literary and Cultural History of India:*

(A) Vedic literature and its main trends; the offshoots of Vedic literature, the Vedangas, a general survey; the Ramayana, the Mahabharata and Puranas, their literary tendencies and their influence on later Sanskrit literature; the emergence of classical Sanskrit literature and its causes.

(B) Social culture in the Vedic and the post-vedic period upto A. D. 650: ancient Indian political institutions in a brief historical survey; culture of fine arts in ancient India upto A. D. 650, with special reference to the arts of architecture, painting and sculpture.



(C) Fundamentals of Indian Philosophy;

Conception of Self.

Nature of the objective world.

Theory of knowledge.

Doctrine of final emancipation.

(In the light of Buddhism, Sankhya and Vedanta).

*Books recommended:*

(1) Winternitz: History of Indian Literature, Volume I.

(2) Masson Oursel and Wellman Gizabowska: Ancient India and Indian Civilization.

(3) P. K. Acharya: Hindu Architecture in India and Abroad, Vol. VI of the Manasara Series.

(4) Keith: History of Sanskrit Literature.

(5) Percy Brown: Indian Painting.

(6) J. Ph. Vogel: Buddhist Art.

(7) Hiriyanana: The Essentials of Indian Philosophy.

For the remaining *two* papers, the candidates shall make a selection out of the following optional papers:—

*Paper III.—Veda and Vedic Exegesis:*

Veda and Avesta; the contribution of Yaska to Vedic studies; the pre-Sayana commentators on the Veda; Vedic studies in modern times; the formation of Vedic literature; Vedic gods, general conception and particular gods; Vedic ritual, general characteristics; the age of the Vedas.



*Books prescribed:*

Selections from the Rigveda by Peterson B. S. S. 36 (Nos. 1, 2, 3, 4, 5, 6, 7, 10, 12, 13, 14, 19, 24, 29, 30 and 33).

*Books recommended:*

- (1) \*McDonell: Vedic Grammar for students.
- (2) \*Ghate's Lectures on Rigveda.
- (3) \*Laghupaniyam. Pt. II.
- (4) \*Oldenberg: Religion of the Vedas.
- (5) \*Keith: Religion and Philosophy of the Vedas.

*Paper IV.—Kavya and Sahitya:**Books prescribed:*

Naisadhiya Caritam—I.

Kavya Prakasha Ullasas, I—II and X ( up to Dipaka only).

Chhandahsutra of Pingala.

Sutras relating to the basis of classification of the metres and the following metres:—

अनुष्टुप्, इन्द्रवज्रा, उपेन्द्रवज्रा, मालिनी, पुष्पिताग्रा, शिखरिणी, शार्दूलविक्रीडित, वसन्ततिलका, स्रग्धरा, आर्या, मन्दाक्रान्ता, वंशस्थ, द्रुतविलम्बित, दोधक, वैतालीय, रथोद्धता, तोटक ।

*Books recommended:*

- (1) \*S. K. De and S. N. Das Gupta: History of Sanskrit Literature: Classical Period.
- (2) \*Keith: History of Sanskrit Literature.
- (3) \*K. C. Pandey: Comparative Aesthetics, Vol. I, Indian Aesthetics.

\*Books marked with an asterisk are those recommended for consultation only.



*Paper V.—Pali and Prakrit:**Books prescribed:*

- (1) Karpura Manjari.
- (2) M. M. Vidu Shekhar Bhattacharya—*Buddhist Texts* (Calcutta University).
- (3) Khuddakapatha.

*Books recommended:*

- (1) \*Woolner: *Introduction to Prakrit*.
- (2) \*Geiger: *Pali language and Literature*.

*Paper VI.—Philosophy.**Books prescribed:*

Tarka Sangraha.

Sankhyakarika with Tattvakaumudi.

*Books recommended:*

- (1) \*J. C. Chatterji: *Hindu Realism*.
- (2) \*Hiriyanna: *Outline of Indian Philosophy*.—(Chapters on Nyaya-Vaisesika and Sankhya).

*Paper VII.—Dharmashastra:**Books prescribed:*

Manusmriti: I—V.

Yajnavalkya-Vyavaharadhyaya.

*Books recommended:*

- (1) \*Kane: *History of Dharmashastra I*.
- (2) \*Jolly: *Hindu Law and Custom*.

\*Books marked with an asterisk are those recommended for consultation only.



- (3) K. V. Rangaswami Aiyangar: Aspects of the Social and Political System of Manusmriti.

M.A. and M.A. Part II.

(For the Examinations of 1952 and after)

There will be *four* papers and a *Viva Voce* Test. The papers will be on *one* of the following subjects:—

A.—Veda.

B.—Pali and Prakrit.

C.—Literature.

D.—Philosophy.

E.—Dharmashastra.

F.—Vyakarana.

Instead of Paper III in each subject, a Thesis may be offered.

*A—Veda.*

*Paper I.*—Rig-Veda, Mandala I.

Suktas 1-4, 7, 10, 12, 13, 14, 20, 24, 31, 35, 37, 40, 42, 43, 48, 50, 91, 125, 154, 156.

Rikpratisakhya. Patalas I, III, VI, XIII, XIV, XVI, XVII, XVIII.

Sayana: Rig-Veda bhasya-bhumika.

*Paper II.*—Nirukta—I, II and VII.

Paraskaragrihyasutra: Kanda I whole and Kanda II, Kandika 1-7 only (upto the Sutra).

(दृढव्रतो वधत्रः स्यात् सर्वत आत्मानं गोपायेत् सर्वेषां मित्रमिव )

*Paper III.*—Thesis.

Or

(a) Essay in Sanskrit.

(b) History of Vedic Literature.



***Books recommended:***

Winternitz: History of Indian Literature, Vol. I  
(portion dealing with Vedic Literature only).

*Paper IV.*—(1) Arthasangraha of Laugakshi Bhas-  
kara.

(2) Aitareyabrahmana Panjika I and II).

***Books recommended:***

(1) Macdonnel: Vedic Mythology.

(2) A. C. Das: Rig-Vedic India.

(3) Childe: The Aryans.

(4) S. Varma: Phonetic observations of Indian  
Grammarians.

(5) Kane: History of Dharmashastra, Vol. II, Pt. I.

(6) S. Samasrami: Aitareyalochana.

***B.—Pali and Prakrit.***

*Paper I.*—Dhammapada.

Kosalasamyutta.

*Paper II.*—Gaudavaho.

Kumārāpalacarita.

*Paper III.*—Thesis or Essay in Sanskrit.

History of Pali and Prakrit Literature.

*Paper IV.*—

Samannaphalasutta.

Ayārangasutta 2nd Khanda.

Suttanipāta (Selected Suttas).



*Books recommended:*

- (1) \*Millinda Panho: Text and Translation.
- (2) \*Dighanikaya: Text and Translation.
- (3) \*Aung: A Compendium of Philosophy.
- (4) \*Rhys Davids: Buddhist India.
- (5) \*Mrs. Rhys Davids: Buddhism.

*C.—Literature.*

*Paper I.—*

- (1) Dhvanyaloka.
- (2) Vyaktiviveka I.
- (3) Alankarasarvasva (upto Samasukti).

*Paper II.—*

- (1) Dasharupaka.
- (2) Abhinavabharati on the Rasasutra.
- (3) Mricchakatika.
- (4) Venisamhara.

*Paper III.—Thesis.*

*Or*

- (a) Essay in Sanskrit.
- (b) History of the Kavyas and Alamkarashastra.

*Syllabus:* History of the Kavya literature with special reference to the following authors: Bhasa, Asvaghosa, Kalidasa, Magha, Sri Harsa, Kshemendra. Dramatic literature in Sanskrit with special reference to the works

\*Books marked with an asterisk are those recommended for consultation only.



of Kalidasa, Bhavabhuti, Sri Harsa, Rajasekhara, Vatsaraja, Krishnamisra: History of literary criticism with special reference to the following:—Bharata, Bhamaha, Udbhata, Vamana, Dandin, Anandavardhana, Abhinavagupta, Kuntaka, Mahimabhata, Mammata, Jagannatha.

*Paper IV.*

- (1) Harsacarita I and II.
- (2) Vikramankadevacarita XIII, XIV and XV.
- (3) Raghuvamsa VII, VIII and IX.

*Books recommended:*

- (1) Keith: History of Sanskrit Literature.
- (2) I. A. Richards: Principles of Literary Criticism.
- (3) S. K. De and S. N. Das Gupta: History of Sanskrit Literature: Classical Period.
- (4) K. C. Pandey: Comparative Aesthetics, Vol. I, Indian Aesthetics.

*D.—Philosophy.*

*Paper I.*—Siddhāntamuktāvali (Pratyaksha only.)  
Arthasangraha.

*Paper II.*—Vedantaparibhasa.  
Śāṅkarabhāṣya II, 2.

*Paper III.*—Thesis.

*Or*

- (a) Essay in Sanskrit.
- (b) History of Indian Philosophy.



*Paper IV.—*

Abhinavagupta—Vimarśini with Bhāskari, Vol. I, Jñānādhikara Ahinka V (edited by Prof. Iyer and Dr. Pandey).

Abhinavagupta: Vimarshini, with Bhaskari, Vol. II, Agamadhikara (edited by Prof. Iyer and Dr. Pandey).

*Or*

Vasubandhu: Abhidharma Kosha.

*Or*

Bodhicharyavatara, Chapter IX Prajnaparamita, with the Panjika.

*Books recommended:*

- (1) \*Sarvadarsanasangraha: (Hindu Oriental Series).
- (2) \*Das Gupta: History of Indian Philosophy.
- (3) \*Radhakrishnan: History of Indian Philosophy.
- (4) \*M. M. S. C. Vidyābhusan: History of Mediæval Hindu Logic.
- (5) \*Pandey: Abhinavagupta.
- (6) \*Mc Govern: Manual of Buddhist Philosophy, Vol. I, (Cosmology).
- (7) \*Warren: Buddhism in Translations.
- (8) \*H. Kern: Manual of Indian Buddhism.
- (9) \*Suzuki: Mahayana Buddhism.

*E.—Dharmashastra.*

*Paper I.—Apastambadharmasutra.*

Vyavaharamayukha.

\*Books marked with an asterisk are those recommended for consultation only.



*Paper II.*—Sabarabhashya—Tarkapada.

*Paper III.*—Thesis.

Or

(a) Essay.

(b) History of Dharmashastra.

*Paper IV.*—Viramitrodaya (Selections).

*Books recommended:*

(1) Kane: History of Dharmashastra, Vols. I—IV.

(2) K. V. Rangaswami Aiyangar: Aspects of the Social and Political System of Manusmriti.

*F.—Vyakarana.*

*Paper I.*—Elements of the Philosophy of Grammar.

*Paper II.*—Sutras of Panini and their application.

*Paper III.*—Essay.

*Paper IV.*—Comparative Philology, etc.

#### TEXT-BOOKS.

*Paper I.*—Vaiyyakaranasiddhantakarikas.

Mahabhasya—Navahnika—Ahnikas, 2, 3 and 4.

*Paper II.*—Siddhantakaumudi—Taddhita.

Bhattikavya—the portion illustrating Taddhita.

*Paper III.*—Thesis.

Or

(a) Essay.

(b) History of Indian Grammar.



*Paper IV.*

Whitney: Language and its Study.

Goldstucker: Panini.

Belvalker: Systems of Sanskrit Grammar.

Gune: Introduction to Comparative Philology.

*Books recommended:*

(1) \*Kondabhata: Vaiyakaranabhusana.

(2) \*Otto Jespersen: Language, its origin, nature, its development.

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\*Books marked with an asterisk are those recommended for consultation only.



## SANSKRIT CULTURE AND CIVILISATION

### B.A. Honours.

*(For the Examinations 1952 and after)*

#### *Paper I.—History of India upto 1200 A. D.*

Detailed History of the growth of Magadha under Haryankas Saisunagas, Nandas and the Mauryas, with special reference to Pali and Brahmanical literary sources. Detailed information (political) on the Sungas, Andhras and Kushans with special treatment of the literary sources, both Brahmanical and Greek. Detailed information of the political set up of ancient India under the Guptas and Harsha, with special treatment of the Epigraphic, literary and numismatic sources. Importance of the post—Harsha Northern dynasties with special reference to the literary sources. Cultural value of the study of the history of this period.

#### *Books recommended:*

- (1) V. A. Smith: Early History of India.
- (2) Dr. R. S. Tripathi: The History of Ancient India.
- (3) Ray Chaudhri: Political History of Ancient India.
- (4) N. N. Ghosh: Early History of India (Vth edition).

#### *Paper II.—Basic Languages:*

#### *Books prescribed:*

Kalidasa: Raghuvamsha, Cato I.

Bhasa: Pancharatra.



*Paper III.—Fine Arts.*

Principles of Indian Art—forms and styles of architecture—Buddhist Supta and monasteries—Chaityas—monolithic pillars—temples—the Nagara, the Dravida and the Vesara Styles, with special reference to important buildings—Mauryan, Kushan and Gupta styles of sculpture. Principles of Indian painting—Shadangas, Buddhist paintings. The Ajanta and Bagh paintings.

*Books recommended:*

- (1) Percy Brown: Indian Painting.
- (2) Foucher: Beginnings of Buddhist Art.
- (3) A. K. Coomaraswamy: History of Indian and Indonesian Art.
- (4) V. A. Smith: History of Fine Art in India and Ceylon.
- (5) Stella Kramerisch: Indian Sculpture.
- (6) Fergusson: History of Indian and Eastern Architecture (portion on Indian Architecture only).

*Paper IV.—Law and Legal Institution:*

*Syllabus:* Outlines of the History of Legal Literature; Laws of Succession, Debt, Partnership, Surety and Crimes; different types of Courts, their constitution and powers and Law of Procedure and Evidence.

*Books recommended:*

- (1) Kane: History of Dharmashastra: Vols. I and II
- (2) Jolly: Hindu Law and Custom.
- (3) Sir C. Varadachari: Hindu Judicial System.
- (4) Dr. Sen: Hindu Jurisprudence.



*Paper V.—Outline of Indian Philosophical Thought.**Books recommended:*

(1) Dutta and Chatterji: Outline of Indian Philosophy.

(2) Hiriyana: Essentials of Indian Philosophy.

**M.A. Part I.**

(For the Examinations of 1952 and after)

*Paper I.—Basic Languages.*

(Books prescribed as in B. A. Hons.)

*Paper II.—Fine Arts:*

(Syllabus and books recommended as in B. A. Hons.)

*Paper III.—Law and Legal Institutions:*

(Syllabus and books recommended as in B.A. Hons.)

*Paper IV.—Outline of Indian Philosophical Thought:*

(Books recommended as in B. A. Hons.)

**M.A. and M. A. Part II.**

(For the Examinations of 1952 and after)

*Paper I.—Social and Economic Life in Ancient India.**Books recommended:*

(1) Kaegi, A: Rig-Veda.

(2) Fick, R.: Social Organisation of the Time of the Buddha.

(3) Mookerji, R. K.: Hindu Civilization.

(4) Sarkar, S. C. A. Glimpse of the Indian Society in the First Centuries, B. C. and A. D.



- (5) Chakladar, H. C.: Social Life in Ancient India.
- (6) Das S. K.: Economic History of Ancient India.
- (7) Banerjee, N. C.: Economic Life and Progress in Ancient India.
- (8) Kautilya: Arthasastra (Translation by Dr. Shama Shastri.)

*Paper II.—(a) Religion:*

Detailed study of Vedic Ritual.

*(b) Philosophy:*

Detailed study of one of the following systems:  
Shankara Vedanta, Shaivism, Vaishnavism:

*Books recommended:*

- (1) Kane: History of Dharma Shashtra, Vols. I and II.
- (2) Das Gupta: History of Indian Philosophy, 3 Vols.
- (3) Radhakrishnan: Indian Philosophy, 2 Vols.
- (4) Hogg: Aitareya Brahmana.

*Paper III.—History of Ancient Indian Literature:*

*Books recommended:*

- (1) Winternitz: History of Indian Literature, 2 Vols.
- (2) Keith: History of Sanskrit Literature.
- (3) Macdonnell: History of Sanskrit Literature.

*Paper IV.—Thesis or Essay.*

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## SANSKRIT CULTURE AND CIVILISATION

B.A. Honours.

*(For the Examinations 1952 and after)*

*Paper I.—History of India upto 1200 A. D.*

Detailed History of the growth of Magadha under Haryankas Saisunagas, Nandas and the Mauryas, with special reference to Pali and Brahmanical literary sources. Detailed information (political) on the Sungas, Andhras and Kushans with special treatment of the literary sources, both Brahmanical and Greek. Detailed information of the political set up of ancient India under the Guptas and Harsha, with special treatment of the Epigraphic, literary and numismatic sources. Importance of the post—Harsha Northern dynasties with special reference to the literary sources. Cultural value of the study of the history of this period.

*Books recommended:*

- (1) V. A. Smith: Early History of India.
- (2) Dr. R. S. Tripathi: The History of Ancient India.
- (3) Ray Chaudhri: Political History of Ancient India.
- (4) N. N. Ghosh: Early History of India (Vth edition).

*Paper II.—Basic Languages:*

*Books prescribed:*

Kalidasa: Raghuvamsha, Cato I.

Bhasa: Pancharatra.



वर्णवृत्तः—वंशस्थ, वसंततिलका, शार्दूलविक्रीडित,  
मालिनी, शिखरिणी, मन्दाक्रान्ता, सवैया ।

मुक्तकः—मनहरण, कवित्त, घनाक्षरी ।

Rasa: रसभेद, स्थायीभाव, विभाव, अनुभाव,  
संचारीभाव ।

*Books recommended:*

Ram Chandra Shukla: Tulsidas.

Misra Bandhu: Hindi Nava-Ratna.

Dr. K. N. Shukla: Adhunikā Kavyadhara.

Jaswant Singh: Bhasha Bhushan.

Lala Bhagwandin Din: Alankar Manjusha.

Vishvanath Prasad Misra: Kavyanga-Kaumudi.

Gulab Rai: Hindi Nava Ras.

Ram Naresh Tripathi: Hindi Padya Rachana.

*Paper II.—Prose, Drama, History of Hindi Literature:*

Jai Shankar Prasad: Ajatshatru.

Prem Chand: Gaban.

Dr. S. K. Lal: Hindi Kahaniyan.

Ram Chandra Shukla: Triveni.

Mahadevi Varma: Smriti ki Rekhaen.

*Books recommended:*

Gulab Rai: Hindi Sahitya ka Subodh Itihas.

Shyam Sundar Das: Hindi Sahitya.

Dr. R. K. Verma and Dr. T. N. Dikshit: Hindi  
Sahitya ka Itihas.



*Paper III—(1) Linguistics and History of Hindi Language  
(2) Hindi Essay.*

**Syllabus for Linguistics and History of Hindi Language.**

भाषा विज्ञान का विस्तार, भाषा की उत्पत्ति और विकास, भाषा-वर्गीकरण के सिद्धान्त, भारतवर्ष की प्रचलित भाषाएँ और उनका सैद्धान्तिक वर्गीकरण, आर्य और द्राविड़ परिवारों का अध्ययन, प्राचीन तथा मध्यकालीन आर्य भाषाओं से हिन्दी एवं अन्य आधुनिक आर्य भाषाओं का विकास, हिन्दी भाषा तथा उसकी बोलियाँ, देवनागरी लिपि का इतिहास ।

*Books recommended:*

Dr. D. Varma: Hindi Bhasha aur Lipi.

Dr. D. Varma: Gramina Hindi.

Dr. Janki Nath Singh: A Handbook of Philology.

Dr. S. K. Chatterji: Indo-Aryan and Hindi.

(pp. 133-179.)

Gopal Lal Khanna: Sarala Bhasha Vigyan.

Dr. Shyam Sundar Das: Hindi Nibadndha Mala.

Dr. Hazari Prasad Dwivedi: Ashoka ke Phool.

Dr. Bhagirath Mishra: Adhyayan.

Ram Vriksha Sharma Venipuri: Mati ki Moorten.

R. C. Varma: Achchhi Hindi.

**B. A. Pass.**

*(For the Examinations of 1953 and after)*

*Paper I.—Poetry, Rhetorics and Prosody:*

Tulsidas: Ramcharitmanas Uttarakanda. (edited by  
Pt. H. K. Avasthi)



Suradas: Surasushama (edited by Nand Dularey Bajpai.)

Bhushan: Shivaraj Bhushan (Udaharan portion only).

Maithili Sharan Gupta: Yashodhara.

Jaya Shankar Prasad: Lahar (omitting the last four poems).

Pant: Adhunik Kavi Pt. II, (first 22 poems).

*The following Syllabus is prescribed on Rhetorics and Prosody:*

Alankars: शब्दः—अनुप्रास, यमक, श्लेष, वक्रोक्ति ।

अर्थः—उपमा, रूपक, अनन्वय, उत्प्रेक्षा, प्रतीप,

अपह्नुति, व्यतिरेक, भ्रम, सन्देह,

उल्लेख, अतिशयोक्ति, अर्थान्तरन्यास,

परिसंख्या, निदर्शना, पर्यायोक्ति,

व्याजस्तुति, व्याजनिन्दा, मुद्रा, अधिक,

अल्प, अप्रस्तुतप्रशंसा, विभावना ।

Prosody: मात्रिक छन्दः—चौपाई, रोला, गीतिका, हरि-

गीतिका, सरसी, दोहा, सोरठा, छप्पय,

कुंडलिया ।

वर्णवृत्तः—वंशस्थ, वसंततिलका, शार्दूलविक्रीडित,

मालिनी, शिखरिणी, मन्दाक्रान्ता, सवैया ।

मुक्तकः—मनहरण, कवित्त, घनाक्षरी ।

Rasa: रसमेद, स्थायीभाव, विभाव, अनुभाव,

संचारीभाव ।



*Books recommended:*

Ram Chandra Shukla: Tulsidas.

Misra Bandu: Hindi Nava-Ratna.

Dr. K. N. Shukla: Adhunikā Kavyādhara.

Vinaya Mohan Sharma: Kavi Prasad, Ansu tathā  
Anyā Kritiyan.

Jaswant Singh: Bhasa Bhūsan.

Lala Bhagwan Din: Alankar Manjusha.

Vishvanath Prasad Misra: Kavyānga-Kaumudi.

Gulab Rai: Hindi Nava Ras.

Ram Naresh Tripathi: Hindi Padya Rachana.

*Paper II.—Prose, Drama, History of Hindi Literature:*

Jai Shankar Prasad: Ajatshatru.

Prem Chand: Gaban.

Dr. S. K. Lal: Hindi Kahaniyan.

Ram Chandra Shukla: Triveni.

Mahadevi Varma: Smriti ki Rekhaen.

*Books recommended:*

Gulab Rai: Hindi Sahitya ka Subodh Itihas.

Shyam Sunder Das: Hindi Sahitya.

Dr. R. K. Verma and Dr. T. N. Dikshit: Hindi  
Sahitya ka Itihas.



*Paper III.—(1) Linguistics and History of Hindi Language.  
(2) Hindi Essay.*

Syllabus for Linguistics and History of Hindi Language.

भाषा-विज्ञान का क्षेत्र, भाषा की उत्पत्ति और विकास, भाषा-वर्गीकरण के सिद्धान्त, भारतवर्ष की प्रचलित भाषाएँ और उनका सैद्धान्तिक वर्गीकरण, आर्य और द्राविड़ परिवारों का अध्ययन, प्राचीन तथा मध्यकालीन आर्य भाषाओं से हिन्दी एवं अन्य आधुनिक आर्य भाषाओं का विकास, हिन्दी भाषा तथा उसकी बोलियाँ, देवनागरी लिपि का इतिहास ।

*Books recommended :*

Dr. D. Varma: Hindi Bhasha aur Lipi.

Dr. D. Varma: Gramina Hindi.

Dr. Janki Nath Singh: A Handbook of Philology.

Dr. Shyam Sundar Das: Hindi Nibandha Mala.

Dr. S. K. Chatterji: Indo-Aryan and Hindi.  
(pp. 133-179.)

Gopal Lal Khanna: Sarala Bhasha Vigyan.

Dr. Hazari Prasad Dwivedi: Ashoka ke Phool.

Dr. Bhagirath Mishra: Adhyayan.

Ram Vriksha Sharma Venipuri: Mati ki Moorten.

R. C. Varma: Achchhi Hindi.

B. A. Honours.

(For the Examination of 1952)

There will be five Papers:—

*Papers I, II, III, and IV*—same as the four Papers of M. A. Part I of 1952.



*Paper V.—Vraja Bhasa Kavya.*

Rahim—Rahim Ratnavali.

Senapati—Kavittaratnakar (omitting the first two tarangas.)

Ghananand—Sujan Sagar (first 200 verses.)

Ratnakar—Uddhavashataka.

Satya Narayan Kaviratna: Hridaya Tarang.

Or

*Adhunik Khari Boli Kavya.*

Hari Audh: Parijat.

Maithli Sharan: Dvapara.

Nirala: Anamika.

Mahadevi Varma: Adhunik Kavi, Pt. I.

Makhan Lal Chaturvedi: Hima Kiritini (first half.)

Dinakar. Kurukshetra.

Or

*Hindi Drama.*

Harish Chandra: Satya Harishchandra.

Jaya Shankar Prasad: Skandgupta.

Hari Krishna Premi: Shiva Sadhana.

Seth Govind Das: Harsha.

Vrindaban Lal Varma: Hansa Mayer.

Ram Kumar Varma: Charu Mitra.



## B. A. Honours.

*(For the Examination of 1953)*

There will be *five* Papers I, II, III and IV will be the same as the four Papers of M. A. Part I of 1953.

*Paper V — Vraja Bhasa Kavya.*

Mira—Padavali: Parashu Ram Chaturvedi.

Rahim—Rahim Ratnavali.

Senapati—Kavittartnakara (omitting the first two tarangas.)

Ghananand—Sujan Sagar (first 200 verses).

Ratnakar—Uddhavashataka.

Satya Narain Kaviratna: Hridaya Tarang.

*Or*

*Adhunik Khari Boli Kavya.*

Hari Audh: Vaidehi Vanvas.

Maithili Sharan: Dvapar.

Nirala: Aparā.

Mahadevi Varma: Adhunik Kavi, Pt. I.

Makhan Lal Chaturvedi: Hima Kiritini (first half),

Dinakar: Kurukshetra.

*Or*

*Hindi Drama.*

Harish Chandra: Satya Harish Chandra.

Jaya Shankar Prasad: Skandgupta.

Hari Krishna Premi: Shiva Sadhana.

Seth Govind Dass: Harsha.

Vrindaba Lal Varma: Hansa Mayur.

Ram Kumar Varma: Charu Mitra.



Or

*Avadhi Kavya.*

- Tulsi: Ram Charitmanas upto Ayodhyakand.  
 Rahim: Baravai Nayika Bhed.  
 Noor Muhammad: Anurag Bansuri.  
 Ishwar Das: Satyavati Katha.  
 D. P. Misra: Krishnayan upto Mathura Khand.

B. A. Honours.

*(For the Examinations of 1954 and after)*

There will be *five* Papers. I, II, III and IV will be the same as the four Papers of M. A. Part I of 1954.

*Paper V.—Vraja Bhasa Kavya.*

- Mira—Padavali: Parashu Ram Chaturvedi.  
 Senapati—Kavittaratnakara (omitting the first two tarangas).

Deva: Deva Sudha (Edited by Mishra Bandhu).

Ghananand—Sujan Sagar (first 200 verses).

Ratnakar—Uddhavashataka.

Satya Narain Kaviratna: Haridaya Tarang.

Or

*Adhunik Khari Boli Kavya.*

Hari Audh: Vaidehi Vanvas.

Maithili Sharan: Dvapar.

Nirala: Aparā.

Mahadevi Varma: Adhunik Kavi, Pt. I.

Makhan Lal Chaturvedi: Hima Kiritini (first half).

Dinakar: Kurukshetra.



*Or*

*Hindi Drama.*

Harish Chandra : Satya Harish Chandra.

Jaya Shankar Prasad : Skandgupta.

Hari Krishna Premi : Shiva Sadhana.

Seth Govind Das : Harsha.

Vrindaban Lal Varma : Hansa Mayur.

Ram Kumar Varma : Charu Mitra.

Upendranath Ashka : Pratinidhi Ekanki.

*Or*

*Avadhi Kavya.*

Tulsi : Ram Charitmanas upto Aydhyakand.

Rahim : Rahim Ratnawali (Barva Nayikabhed and Barvas).

Noor Muhammad : Anurag Bansuri.

Ishwar Das : Satyavati Katha.

D. P. Misra : Krishnayan upto Mathura Khand.

*Or*

*Rajasthani Kavya.*

Narapati Nalha : Visaldeva Raso, (first two khandas)

Bankidas : Bankidas granthawali, Vol. III (first eight poems).

Manchharam : Raghunath Rupaka Gitanro (first three Bilasas-Balkanda).

Dhola Marura Duha : (first 207 verses).

Suryamalla Mishrana : Vir Satsai (first 100 verses).



## M.A. Part I.

(For the Examinations of 1952 and after)

There will be four Papers:—

*Paper I.—Early Text:*

Chand Bardai: Prithvi Raj Raso, Reva Tata Samaya (from 'Prithvi Raj Raso ke do Samaya' by Dr. Bhagirath Mishra).

Vidyapati Padavali—The following portion: Vandana, Prema-Prasanga. Basanta, Prarthana and Nachari, (Laharia Sarai Edition.)

Kabir Granthawali (Sakhi portion) Edited by Dr. S. Das.

Jayasi: Padmawat (first 30 Khandas).

Prithviraj: Veli Krishna Rukmini Ri.

*Books recommended:*

Mishra Bandhu: Hindi Navaratna.

Narendranath Das: Vidyapati Kavyaloka.

Dr. Barthwal: Hindi Kavya Men Nirguna Sampradaya.

Dr. H. P. Dwivedi: Kabir.

Dr. R. K. Varma: Kabir Ka Rahasyavad.

Chandra Bali Pandey: Tasawwuf Athawa sufi mata.

Dr. Barathwal: Yoga Pravah.

Acharya Kshiti Mohan Sen: Mediaeval Mysticism of India.

Dr. Kamal Kulshreshtha: Malika Mohammad

Jayasi.



*Paper II.—Mediæval Test:*

Sura Das: Bhramaragitasar.

Tulsi Das: Vinayapatrika.

Nand Das: Raspanchadhyayi.

Keshava Das: Ram Chandrika (upto Sundarkand).

Bihari: Bihari Satsai.

*Books recommended:*

Ram Chandra Shukla: Suradas.

Munshi Ram Sharma: Sur Saurabha.

Ram Chandra Shukla: Tulsi Ganthawali. (Pt. iii).

Dr. Mata Prasad Gupta: Tulsidas.

Uma Shankar Shukla: Nandas.

Dr. Dharendra Varma: Ashtachhap.

Prachina-Varta-rahasya Part ii—Edited by Dwarkadas Purshottam Das (Kankarauli.)

Vishvanath Prasad Misra: Bihari ki Vagvibhuti.

Padma Singh Sharma: Bihari Satsai ki Bhumika.

Dr. D. D. Gupta: Ashta-chhap aur Vallabha Sampradaya.

Dr. Shyam Sundar Das: Satasai Saptaka.

Nabhadas: Bhaktamal.

Dr. Baldeva Prasad Misra: Tulsi-Darshan.

Dr. Bhagirath Mishra: Sahitya-Sadhana.

Dr. S. P. Agrawal: Akbari Darbar ke Hindi Kavi.



**Paper III—Basic Language and Literature:**

**A —Sanskrit, Pali and History of Classical Sanskrit Literature.**

*Or*

**B.—Sanskrit, Prakrit and History of Classical Sanskrit Literature.**

*Or*

**C.—Sanskrit, Apabhramsha and History of Classical Sanskrit Literature.**

*Sanskrit.*

**Raghuvamsa XIII Canto only.**

**Swapnavasavadatta of Bhasa.**

*Pali:*

**Pali Jatakavali.**

**Pali Prabodha—by Pt. A. D. Thakur.**

**Books recommended:**

**Keith: Classical Sanskrit Literature.**

**Chandrashekhar Pande: Sanskrit Sahitya ki Ruparekha.**

*Prakrit:*

**A. C. Woolner: Introduction to Prakrit: Grammar—Portion full and Text No. 4, 9, 15, 19, 22, 30 and 32.**

*Apabhramsha.*

**Dhanpal: Bhavisayattakaha (first two Sandhis.)**

**Hema Chand: Shabdanushasan, Apabhramsha portion.**



*Paper IV.—*

(a) History of Hindi Literature including outline of the History of Urdu Literature.

(b) Hindi poetics and principles of modern criticism:

Shabda Shakti, Rasa-Sidhanta, Dhvani, Guna and Alankara, Technique of drama—Plot, stages of action. Realism and Idealism in drama, Conception of the hero, Principles of the construction of the novel and the short story. Essay and its varieties. Criticism, its types and functions.

*Books recommended:*

Ram Chandra Shukla: Hindi Sahitya ka Itihas (Revised and enlarged edition).

Dr. Shyam Sundar Das: Hindi Sahitya.

Dr. R. K. Verma: Hindi Sahitya ka Alochanatmak Itihas.

Dr. Hazari Prasad Dwivedi: Hindi Sahitya ki Bhumika.

Krishna Shankar Shukla: Adhunik Hindi Sahitya ka Itihas.

Dr. Shyam Sundar Das: Sahityalochan.

Shaligram Shastri: Sahitya Darpan (Hindi Translation.)

Kanhaiya Lal Poddar: Kavya Kalpadrum.

Hudson: Introduction to the Study of Literature.

I. A. Richards: Principles of Literary Criticism.

Gulab Rai: Siddhanta aur Adhyayan.

Sudhanshu: Jivan ke tattva aur kavya ke Siddhanta.



Ram Dahin Mishra: Kavya Darpan.

Dr. Bhagirath Mishra: Hindi Kavyashastra ka Itihas.

Pt. Baldeva Upadhyaya: Bharatiya Sahitya Shastra.

Dr. Shyam Sundar Das

and

Dr. Barthwal.

Rupaka-Rahasya.

Vrijaratna Das: Urdu Sahitya ka Itihas.

M.A. and M. A. Part II.

*For the Examinations of 1952 and after)*

*Paper I.—Linguistics and Historical Grammar of Hindi.*

(a) Principles of the Science of Language.

History of the Science: Origin and development of Language, causes of change in Language, Phonetic Laws, Morphological development of Language, principles of the association of meaning with words. Families of speech. History of writing.

(b) Comparative Philology with special reference to the Hindi Language and Historical Grammar of Hindi.

Indo Aryan, its History, place of Hindi in the Indo-Aryan, Hindi and its dialects. The Hindi sound system. Treatment of foreign sounds, Accent. History of case, Origin of the post-positions, Pronouns, Gender of adjectives, Numerals, Verbs, Participles, Formation of Tenses, History of the Deva Nagari Script.

*Books recommended:*

Dr. Babu Ram Saxena: Samanya Bhasa Vigyan.

Bloomfield: Study of Language.

Graff: Language and Languages.



Gune : Introduction of Comparative Philology.

Jespersen : Language—its nature, development and origin.

Sweet : History of Language (Temple Primer Series.)

Dr. S. Das : Bhasavigyan (2nd Edition.)

Vendryis : Languages.

Beams : Comparative Grammar of Modern Aryan Languages of India.

Dr. Chatterji : Origin and development of Bengali Language (Introduction.)

Dr. Dharendra Varma : Hindi Bhasa ka Itihas.

Grierson : Linguistic Survey of India, Vol. I, Part I.

Jahangirdar : Indo-Aryan Languages (Oriental Books Agency, Poona.)

Kellog : Grammar of Hindi Language.

*Paper II.—Special Author.*

Kabirdas or Surdas or Tulsidas or Keshavadas or Harish Chandra, or Jaya Shankar Prasad.

(Note—For the year 1952, only Surdas, Tulsidas and Harish Chandra are allowed.)

*Paper III.—(a) Modern Text.*

Poetry, Prose and Drama.

*Poetry:*

Ayodhya Singh Upadhyaya : Priyaprasava.

Maithili Sharan Gupta : Saketa.

Jaya Shankar Prasad : Kamayani.



*Prose:*

Premchand : Godan.

B. L. Varma : Jhansi ki Rani.

Vinod Shanker Vyas—Madhukari Part I.

Ram Chandra Shukla : Chintamani Part I.

*Drama:*

Harishchandra : Chandravali.

Badrinath Bhatta : Durgavati.

Jaya Shankar Prasad : Chandragupta.

(b) Urdu.

Ram Naresh Tripathi—Kavita Kamudi (Urdu) Part IV—Galib.

*Books recommended:*

Girish : Gupta ji ki Kavyadhara.

Dr. K. N. Shukla : Adhunik Kavyadhara.

Dr. Varshneya : Adhunik Hindi Sahitya ka Itihas.

Dr. Shri Krishna Lal : Adhunik Hindi Sahitya ka Vikas.

Pt. R. C. Shukla : Hindi Kavya Men Rahasyavada.

Harish Chandra : Natakavali (Introduction.)

Dr. Jagannath Prasad : Prasad ke Natakon ka Shastriya Adhyayan.

Dr. Keith : Sanskrit Drama.

Nicell : Theory of Drama.



Dr. K. N. Shukla: Adhunikā Kavyādhara ka Sanskritik Srota.

Manmath Nath Gupta and Ramendra Nath Varma: Premā Chand Kathakar.

Braj Ratna Das: Bharatendu Mandal.

Prem Narain Shukla: Bharatendu ki Natya Kala.

Bangiya Hindi Parishad: Bharatendukala.

Dr. Fateh Singh: Kamayani Saundarya.

*Paper IV—Essay or Thesis.*



**MILITARY SCIENCE****B. A. Pass.**

There will be *two* written papers and a Practical examination.

*Paper I.*—Military organisation—organisation of the G. H. Q., Command, Area, Infantry Battalion, Company and Platoon.

Interior Economic and Regimental duties.

Map Reading—Modern weapons including the functions and characteristics of Infantry weapons.

Artillery and Aircrafts.

Field Craft and Tactics.

War Gases and their characteristics, Immediate action.

Hygiene and Sanitation.

*Paper II.*—Military Geography, Raw materials—Manpower—Communication and War Finance.

Military History—One of the following Campaigns—

1. The Shenandoah Valley Campaign 1861-62.
2. Wavell's Campaign in Libya.
3. Battle of All Alemein.

Indian Military Law, Indian Army Act, I. F. T. Act and Rules and Regulations.



The Practical examination in B.A. Preliminary will be as follows:—

*Part I.*

**1. Squad Drill.**

Fall-in, position of attention, stand-at-ease, turning at the halt, dressing, marking-time open order, saluting at the halt and on the march, changing direction, dismissing, shoulder-arms, order-arms, saluting with the rifle.

The Examination will test the precision and bearing of the candidate in drill and also his power of command. Candidates will be required to take command of and drill a squad with or without arms. Particular attention will be paid to self-confident bearing and word of command of the candidate.

**2. Weapon Training:—**

(a) *Rifle.* Elementary mechanism, trigger pressing, daily cleaning, loading and unloading, aiming, lying position, cleaning before and after firing and during a gas attack, individual fire, discipline training.

T. O. E. Ts. 1, 2, 3 and 4.

Reference S. A. T. Vol. I, Pamphlet No. 3, Lessons 2, 3, 4, 5, 6 and 10.

(b) *Application of Fire:—*

Method of searching ground, locating service targets, judging distance, recognition of targets, fire control orders, range cards.

Reference S. A. T. Vol. I, Pamphlet 2.

Candidate's ability to control the fire of a section will be tested.



### 3. Map Reading:—

Conventional signs, definitions, scales, contours North point and bearing, location of grid.

Candidates will also be tested in the knowledge of practical use of Compass and Service Protractor.

Each candidate will be required to set a Map and to demonstrate his ability to use the Compass and Service Protractor.

Reference Elementary Map reading.

### 4. Field Craft and Leaderships:—

Observation, concealment, duties of Scouts and Sentries, Bn. Signal Code, Morse Code, Organisation of an Infantry Bn., Infantry Weapons and supporting Arms.

All candidates will be required to give:—

(a) Verbal orders as Section Commanders.

(b) Move a section in the most appropriate formation over a given piece of ground.

(c) Give verbal and written messages.

Reference I. S. L. 1944 M. T. P. 33.

Total marks for the Practical examination will be 34. In order to pass a candidate must obtain 33% of the total marks but not less than 25% in any one of the subjects.

### 5. Physical Fitness Tests:—

All candidates will be required, during the month prior to the examination, to have passed the following test of physical efficiency.

**RUNNING:—**(i) 100 yards to be run in 15 seconds.

(ii) 1 mile to be run in 6 minutes 40 seconds.



**JUMPING:—**(i) Long Jump 12 feet from the fore-most mark of the take-off foot to the rear impression in the sand.

(ii) Jumping from a height—the candidate will jump outward a distance of 7 feet from a height of 5 feet.

(iii) Candidates will be required to climb a six feet wall made of planks or bricks and having no foot-holds.

These tests will be carried out in P. T. Kit.

Practical examination in B.A. Pass will be as under:—

### **1—Weapon Training:—**

(a) Instructional Ability:—Candidates will be tested in their knowledge and in their ability to instruct.

Candidates will be asked to instruct on any two of the following lessons:—

L. M. G. Lesson 1 to 10 and 13 to 23 (V. B. or Bren) S. A. T. Vol. I, Pamphlet 4,

Rifle:—Lesson 2 to 6, Pamphlet No. 3.

Bayonet:—Lesson 1 to 3 (S. A. T. Vol. I, Pamphlet 12).

(b) Knowledge of Weapons:—Candidates will be asked questions on:—

Rifle:—Lesson 7, 8, 9 and 13 to 18. (S.A.T. Vol. I, Pamphlet 3).



L. M. G. T. O. E. T's. 1 to 8 (S. A. T. Vol. I, Pamphlet 4).

Anti-Aircraft:--(S. A. T. Vol. I, Pamphlet 6).

2" Mortor:—General Notes (S. A. T. Vol. I, Pamphlet 8).

II.—T. E. W. T. or Sand Table Exercise:—

Candidates will be tested in their knowledge of the duties of a Section Commander and in their powers of leadership and command.

Questions will be asked on:—

Reconnaissance and protection.

Action against Tanks.

Defence against Air attack.

Protection against Gas.

Attack and Defence.

Field defence works.

Leadership and Command.

Total marks for the Practical examination in B. A. Pass will be 50. In order to pass the candidate must secure at least 33% marks.

*Books recommended:*

Manual of Indian Military Law.

Regulations for the Army in India.

King's Regulations.

O'Donnel: Indian Military Law.



- I. T. F. Act 1920, Rules and Regulations.  
 Pendlebury: Elementary Tactics.  
 Cole: Imperial Geography.  
 Cole and Priestley: Outline of British Military History.  
 Liddell Hart: Decisive Wars of History.  
 Boycott: Elements of Imperial Defence.  
 Wavell: Generals and Generalship.  
 Fall: Military History of the War in Palestine.  
 Wavell: Palestine Campaign.  
 Official History of War 1914-1918.  
 MacMunn: Military Operations—Egypt and Palestine.  
 Kearsey: Notes and Lectures on the Campaign of Mesopotamia.  
 Growther: The Sinews of War.  
 Growther: Paying of the War.  
 Richmond: The Naval Role in Modern Warfare.  
 Strategicus: To Stalingrad and Alamien.  
 Talbor: Speaking from the Desert.
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## GEOGRAPHY.

**B. A. and B. Sc. Pass.**

There will be *three* Papers as follows:—

*Paper I:—Principles of Geography:*

A.—Physical Geography.

B.—Human and Economic Geography.

*Paper II:—Regional Geography:*

Asia with special reference to India.

*Practical Examination:*

*Paper I:—A.—Physical Geography.*

The Earth, Day and Night. The seasons. Latitude, Longitude and Time belts, Standard Time.

Types of climate and their features. Precipitation. Temperature. Relative Humidity. Relative amount of sunshine and cloud. Winds. Classification of Types of Climate and their Geographical Distribution.

Types of Natural Vegetation and Animal Life. Land-forms and their Origin. Classification of the materials of the Earth's Crust. The process of gradation. Classification of soils.

The Ocean and its Littoral, circulation, temperature and salinity.

*Books recommended:*

De Martonne: Shorter Course of Physical Geography.

Tars and Martine: College Physiography.

Fox: Physical Geography for Indian students.



Sauer, Ortwin and Leighly : Introduction to Geography.

Finch and Trewartha : Elements of Geography.

Miller : Physical Geography.

B.—Human and Economic Geography.

Inter-relations between Man and his Habitat. The Habitat of Early Man and Historic Wanderings.

Natural Regions in Relations to the Origin and Physical Characteristics of the Major Races of Mankind.

Distribution, Density and Movement of Population, Geo-Politics.

Types of Rural and Urban settlements in relations to Geographic factors.

The World's Empty lands. Possibilities of their Utilisation.

Chief Mineral Resources of the world: Coal. Iron, Petroleum, Manganese, Tin, Aluminium.

Chief Commodities: Wheat, Rice, Sugar (beet and cane). Oil seeds (including the soyabean), Coffee, Tea, Cotton, Silk, Wool, Timber, Jute.

Power Resources: Copper, Lead, Zinc, Water-power.

Means of Communication: Trade Routes, Land, Water, Air.

*Books recommended:*

Huntington and Cushing: Principles of Human Geography.

Blacke : Principles of Human Geography.

Zimmerman : World Resources and Industries.

Ford Dary'l : Habitat, Economy and Society.

Brettell : Social and Economic Geography.



*Paper II:*

A detailed knowledge of the Physical, Economic, Historical and Political aspects of the geography of (a) India and (b) Europe or N. America.

*Books recommended:*

Lyde: The Continent of Asia.

Bergsmark: Economic Geography of Asia.

Dudley Stamp: Asia—An Economic and Regional Geography.

Dubey: Economic Geography of India.

Nazir and Mathur: India.

Davies, D. H.: Earth and Man.

The Indian Year Book (Current Number).

*Practical Examination:*

Scales, Reduction and enlargement of maps; Interpretation of topographic maps: Construction, study and use of weather charts and maps. Measurement of simple meteorological data. Collection and representation of economic and geographic data. Study of Map projections, Mercator's, Mollweide's, Bonne's, simplices, conical Zenithal projections.

Field work: Use of instruments—chain and tape, plane table, prismatic compass.

*Books recommended:*

Bygott: Map Work and Practical Geography.

Jamesol and Ormsby: Surveying and Map Projection.

Hue and Bryant: Map Work.

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**MATHEMATICS.**

(See Faculty of Science.)

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## CHAPTER X.

## THE EXAMINATIONS\*—FACULTY OF SCIENCE.

## A—ORDINANCES AND REGULATIONS.

## Bachelor of Science (General).

*These Ordinances apply both to B.Sc. Pass and B.Sc. Honours.*

1. Candidates shall not be admitted to the Final examination or to any part of the examination prescribed for the degree of B.Sc. unless they have:—

- (i) Completed a regular course of study as prescribed for that degree and furnished a certificate signed by the Dean of the Faculty that they have attended 75 per cent of the University lectures, tutorials and practicals (counted separately), in each subject offered by them for the examination.

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone a shortage of attendance to the extent of

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\*Teaching in the B.Sc. classes has been started in Hindi and Urdu from the Session 1946-47. The question-papers for the B.Sc. Examinations of 1948-49 have been set in English and Hindi written in Devanagri script but with effect from the Examinations of 1950, the question-papers will be set in Hindi only, the script being Devanagri. Students will be given the option to answer the question-papers in English or Hindi written in Devanagri script upto the Examinations of 1953, but with effect from the Examinations of 1954 and onwards the answers shall be written in Hindi only, the script being Devanagri.

For some time to come English technical terms as used at present may be permitted for the B.Sc. Examinations.



four and nine lectures or tutorials in Chemistry and Mathematics respectively, and three lectures or three tutorials in Physics, Zoology, Geology and Botany each, in addition to three practicals in Physics, Chemistry, Zoology, Geology and Botany each;

- (ii) fulfilled the conditions laid down for the residence of students; and
- (iii) satisfied the requirements of Regulations\* prescribed for the Test and Terminal examinations.

2. A candidate who fails to appear in or pass an examination shall attend not less than 75 per cent of a fresh course of lectures and tutorials during a subsequent full academic year before he is permitted to appear or re-appear at the examination of that year.

#### *Test and Terminal Examinations.*

1. The B.Sc. Preliminary examination shall be held at the end of the first year. The Regulations. examination shall consist of two theory papers and a practical examination in each subject except in Chemistry where there will be three theory papers and a practical examination and in Mathematics where there will be only two theory papers. In addition here shall be five class examinations in each subject to be conducted by the Heads of the various departments.

The maximum marks allotted in each paper, practical examination and class-tests, in each subject will be as given in the scheme below.

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\* These Regulations are printed after Ordinance No. 2.



It is necessary to obtain pass marks in theory including class-tests and also in practical work separately.

2. The result of the Preliminary examination shall be considered by the Results Committee, consisting of the Heads of Departments of the Faculty, with the Dean as Convener. The Committee shall decide all cases of promotions and their decision shall be final.

3. If a candidate is absent from the examination for any reason whatsoever he will be regarded as having obtained zero in that examination.

4. There shall be no supplementary examination after the B.Sc. Preliminary examination

5. There shall be four class examinations in the II year.

6. Terminal examinations of M.Sc. students may be held at the discretion of the Head of the Department.

7. In determining promotions from the first to the second year, the following rules shall be observed:—

(a) Every candidate who obtains 33% marks or more in each of the three subjects of examination shall be declared to have passed.

(b) Every candidate who obtains 33% or more marks in each of the two subjects and not less than 25% in the third shall be promoted.

(c) Border line cases shall not be considered for promotion from the first to the second year.

(d) The results shall be published by the Registrar.



### *Scheme of Examination.*

Physics, Botany, Zoology, Geology, Geography, Statistics and Physiology—

			Marks
Two Papers, each	....	....	40
Practical Test	....	....	40
Class-Tests	....	....	30
			(Theory 20 and Practical 10)

Chemistry—

Three Papers as follows:—

Physical Chemistry	....	....	27
Inorganic Chemistry	....	....	26
Organic Chemistry	....	....	27
Practical Test	....	....	40
Class-Tests	....	....	30
			(Theory 20 and Practical 10)

Mathematics and Statistics—

Two Papers, each	....	....	60
Class-Tests	....	....	30



### Bachelor of Science Pass.

1. Course of study for the B.Sc. Pass degree shall extend over a period of two academic years, one of which shall be the academic year preceding the examination and the Degree examination shall be held at the end of the second academic year.

2. Every candidate shall be required to pass in each of the subjects comprised in any one of the following groups of subjects and General English:—

- (1) Physics, Chemistry and Mathematics.
- (2) Chemistry, Botany and Zoology.
- (3) Physics, Chemistry and Botany.
- (4) Physics, Chemistry and Zoology.
- (5) Physics, Botany and Zoology.
- (6) Physiology, Botany and Zoology.
- (7) Chemistry, Botany and Physiology.
- (8) Chemistry, Zoology and Physiology.
- (9) Chemistry, Physics and Physiology.
- (10) Geology, Zoology and Botany.
- (11) Geology, Chemistry and Botany.
- (12) Geology, Chemistry and Zoology.
- (13) Geology, Chemistry and Physics.
- (14) Geology, Chemistry and Mathematics.
- (15) Geology, Physics and Mathematics.



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- (16) Geography, Geology and Economics.
  - (17) Geography, Chemistry and Geology.
  - (18) Geography, Geology and Zoology.
  - (19) Geography, Geology and Botany.
  - (20) Geography, Geology and Mathematics.
  - (21) Geography; Mathematics and Economics.
  - (22) Geography, Mathematics and Physics.
  - (23) Geography, Botany and Zoology.
  - (24) Geography, Botany and Physics.
  - (25) Geography, Geology and Physics.
  - (26) Geography, Chemistry and Botany.
  - (27) Mathematics, Physics and Statistics.
  - (28) Mathematics, Chemistry and Statistics.
  - (29) Statistics, Mathematics and Geography.
  - (30) Statistics, Mathematics and Economics.
  - (31) Statistics, Mathematics and Philosophy.
  - (32) Botany, Zoology and Statistics.
  - (33) Botany, Statistics and Geography.
  - (34) Zoology, Statistics and Geography.
  - \*(35) Euthenics: Applied Chemistry, The Family, and Living Science.
  - (36) Mathematics, Physics and Astronomy.

Provided that no candidate shall be allowed to take any subject other than Physiology, Geology, Geography,

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\*This combination is allowed for I. T. College students only.



Statistics, Economics, Philosophy and Euthenics, unless he has passed an examination in the corresponding subject in the Intermediate or any other examination recognised, as qualifying for admission to a degree course, and that in the case of Physiology, the candidate should have passed in Biology at the examination.

Provided that no candidate shall be allowed to take Statistics unless he has passed the Intermediate Examination with Mathematics.

Provided further that arrangements can be made for the teaching of subjects in a particular group.

3. Students who are reading for a Pass degree may, on the recommendation of the Head of the Department, be transferred by the Dean to an Honours course at any time up to the end of the first year of study.

\*3A. Students who have taken the B.Sc. degree of this University or of any other approved University, may, after pursuing the prescribed course of study, be permitted to appear in any one of the subjects prescribed for the B.Sc. degree and not taken by them at a previous Degree examination, and, if successful, be granted a certificate to that effect.

Provided that students who have taken the B. A. degree of the University with Mathematics and one other

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\*(i) Full Examination fees and two-thirds of the Tuition fees shall be charged from students who are eligible to appear in any one of the subjects for the B.Sc. degree under this Ordinance.

(ii) Students of the B.Sc. II year class, permitted to attend classes in Statistics, (a) be permitted to sit for the Statistics Paper with the B.Sc. Pass students, and (b) if declared successful, be granted a certificate to that effect. (Executive Council Res. No. 11 dated February 23, 1945).



subject assigned to the Faculty of Science may, after pursuing the prescribed course of study, be permitted to appear in Statistics, as prescribed for the B.Sc. degree, provided they have not taken this subject at a previous examination, and, if successful, be granted a certificate to that effect.

4. The examination for the degree of Bachelor of Science shall be by means of papers, but candidates shall be required to undergo a practical examination, except in the case of Mathematics, examination in which shall be entirely by means of papers.

5. Names of successful candidates shall be arranged in three divisions\*. Candidates who obtain 60 per cent and upwards of the aggregate marks shall be placed in the *First* division. Candidates who obtain 48 per cent and upwards of the aggregate marks shall be placed in the *Second* division. Candidates who obtain 36 per cent and upwards of the aggregate marks shall be declared to have passed and shall be placed in the *Third* division. Names of successful candidates shall be classified in three divisions and arranged in order of merit within the first division and in alphabetical order within the second and third divisions.

6. In order to pass, candidates must obtain a minimum of 33 per cent of the total marks in the written, including class-tests, and also in practical test, if any, in each subject separately.

7. If a student fails either in the written papers or in the practical in a subject (but not in both written and practical), and obtains at least 25 per cent marks in that subject and in addition 40 per cent in each of the

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\*The marks obtained by a candidate in General English shall not count for class or division in his Degree examination.



other subjects, he may be allowed to appear at a supplementary examination, to be held in the following month of July, in the subject in which he failed, without further attendance at lectures, provided that a student who failed in the practical shall produce a certificate from the Head of the Department concerned to the effect that he has undergone (after the April examination) a fresh course of practical training at the University covering a period of not less than six weeks, with practical work extending over 100 hours, for which training the University shall provide suitable arrangements.

If a student is unable to avail of the above concessions in the July examination, he may be allowed to avail of the same concessions in the following April examination.

A student who is successful at either of the examinations under the above Ordinance shall be declared to have passed the B.Sc. examination, without being placed in any division.

A student who fails at the July examination or the following April examination under the above Ordinance shall, if appearing in a subsequent examination, be required to appear in all subjects.

### Bachelor of Science Honours.

1. There shall be the following Honours Schools Ordinances. in the Faculty:—

- (i) Physics.
- (ii) Chemistry.
- (iii) Botany.
- (iv) Zoology.
- (v) Mathematics.
- (vi) Geology.



2. Course of study for the B.Sc. Honours degree shall extend over a period of three academic years and there shall be an examination at the end of the third academic year. Students will not be permitted to enter for the examination for Honours later than the end of the fourth year from their admission to B Sc. course.

3. Every candidate for the degree of B.Sc. Honours shall, in addition to his Honours subject, be required to pass an examination in each of two subsidiary subjects and General English.

The following statement shows the subsidiary subjects which may be taken with a particular principal subject:—

*Principal Subject:—*

*Subsidiary Subjects.*

(i) Physics

Chemistry and Mathematics.

(ii) Chemistry

Physics and Mathematics.

*Or*

(iii) Botany

Botany and Zoology.

(iv) Zoology

Zoology and Chemistry.

(v) Mathematics

Botany and Chemistry.

(vi) Geology

Physics and Chemistry.

(vii) Botany

Botany and Zoology.

(viii) Zoology

Geology and Zoology.

(ix) Geology

Botany and Geology.

Physics and Mathematics.

4. The examination in the subsidiary subjects may be taken at the end of the second year, and shall be identical with the B.Sc. Pass degree examination in those subjects.



5. A candidate for an Honours degree who fails in one or both of the subsidiary subjects at the end of his second year may appear again at the end of third and fourth year in the subject or subjects in which he has failed; provided that no candidate for an Honours degree will be permitted to appear for examination in his subsidiary subjects more than twice.

6. A candidate for an Honours degree who attains the necessary standard in his subsidiary subjects but who fails to attain the Honours standard in his principal subject shall, subject to the provisions of Ordinance No. 1 (under "Bachelor of Science—General"), be allowed to present himself for examination in that subject at the end of the next year and if successful shall be given an Honours degree without class.

7. Candidates who have failed to obtain Honours may, if they attain the prescribed standard, be recommended for a Pass degree.

8. If an Honours student, having completed his course of study, fails to obtain either an Honours or a Pass degree he may be allowed to take the Pass examination in all the three subjects after one year of further study.

9. Students who hold a Pass degree and wish to take an Honours degree, may be admitted to the second year Honours class in the subject of their choice which must be one of those taken for the Pass degree and qualify by a two years' course of study to appear at the examination in Honours.

Provided that the period may, by the Academic Council, on the special recommendation of the Dean, be reduced to one year in the case of students who have passed the B.Sc. Examination in the first division.



10. Candidates who have passed the examination of one Honours School may, after pursuing a further course of study approved by the Dean for at least one and not more than two academic years, be admitted to the examination of any other Honours School. Such candidates shall be required to take the papers in the principal subject of their second Honours School only and not in any subsidiary subjects.

11. Students who are reading for an Honours degree may, on the recommendation of the Head of the Department concerned, be transferred by the Dean to the Pass course.

12. A candidate who, having completed a course of study, is prevented by sickness from appearing in or completing the examination may supplicate for an *Aegrotat* degree. The cases of such candidates will be decided by the Academic Council upon the records of class work.

The degree will be described as an *Aegrotat* degree upon his diploma and for purpose of admission to subsequent examinations will be treated as a Pass degree.

13. The examination for the degree of Bachelor of Science with Honours shall be by means of papers but candidates shall be required to undergo a practical examination, except in the case of Mathematics, examination in which shall be entirely by means of papers.

Candidates shall be required to pass separately in the practical examination.

14. Candidates who pass the examination shall be classified in three divisions\* :—

*First* division, candidates obtaining not less than 60 per cent of the total marks in the Honours subject.

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\*The marks obtained by a candidate in General English shall not count for class or division in his Degree examination.



*Second* division, candidates obtaining between 48 per cent and 60 per cent of the total marks in the Honours subject.

*Third* division, candidates obtaining between 36 per cent and 48 per cent of the total marks in the Honours subject.

Candidates obtaining not less than 30 per cent of the total marks in the Honours subject may be allowed a Pass degree.

Names of successful candidates shall be published together with the principal subject in which they have passed: they shall be classified in three divisions and arranged in order of merit within the first division and in alphabetical order within the second and third divisions.

### Master of Science.

*(For Honours Graduates)*

Ordinances. Candidates shall not be admitted to the course for the degree of Master of Science unless they have taken the degree of B.Sc. (Honours) of Lucknow University or of another University\* having Honours courses extending over three academic years.

2. A candidate may, not less than one year after passing the B. Sc. Honours examination, present himself for the M.Sc. Degree examination, in the subject in which he took Honours.

A candidate who has passed the M.Sc. Part II examination in any subject may, for the purpose of this

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†For the list of approved Universities see Chapter V II.



Ordinance, be considered to have passed the B. Sc. Honours examination in that subject and may present himself for the M.Sc. Degree Examination in the same subject after at least one year of his passing the M. Sc. Part II examination, provided that all papers to be taken by him are different from those offered for the M. Sc. Part II examination already passed by him.

3. The degree of Master of Science shall be conferred on candidates who have graduated with Honours, provided they have—

(a) completed a further course of study or research approved by the University in the year immediately preceding the examination, subject to the provisions of Ordinance No. 1, under "Examinations—Miscellaneous";

(b) fulfilled the conditions laid down for the residence of students; and

(c) passed a prescribed examination which may include examination on a dissertation.

*(For Pass Graduates)*

1. The degree of Master of Science shall also be conferred on graduates who have not taken Honours course but have pursued a regular course of study (which may include research) in the University for not less than two academic years since taking their Bachelor's degree and have fulfilled the conditions laid down for the residence of students and have passed the prescribed examinations.

2. A student's choice of subject in the M. Sc. examination shall be restricted to one of the subjects taken for the Bachelor's degree.



3. The examination shall consist of two Parts: Part I and Part II.

4. A student after completing a regular course of study for not less than one academic year shall be admitted to Part I of the M. Sc. examination of that year.

5. Part II of the Examination in any subject shall be open to all students who have, since passing Part I in that subject, prosecuted a regular course of study (which may include research) for not less than one academic year immediately preceding the year of examination.

6. Division shall be awarded on the combined results of the examinations in Part I and Part II.

*(For both Pass and Honours Graduates)*

Ordinances. 1. (a) A candidate for the M.Sc. examination may, subject to the approval of the Head of the Department, present a dissertation, embodying the results of an original investigation, in lieu of one of the theoretical papers, provided—

(i) that the dissertation shall carry the same number of marks as the paper;

(ii) that the dissertation shall be examined by an external examiner.

(b) The examination for the degree of Master of Science shall be either (i) by means of papers or (ii) partly by means of papers, partly by research. Candidates shall be required to undergo practical and *viva voce* examination except in the case of Mathematics.

(c) Candidate shall be required to pass separately in the practical examination.



2. Names of successful candidates shall be published in such form as to indicate the subjects in which they have passed and to show whether they have presented any dissertation, and shall be arranged in three divisions:—

- (i) *First* division, candidates obtaining 60 per cent and over of the aggregate.
- (ii) *Second* division, candidates obtaining below 60 per cent but not less than 48 per cent.
- (iii) *Third* division, candidates obtaining below 48 per cent but not less than 36 per cent.

The names of those who pass in the first division shall be arranged in order of merit and of those who pass in the second and third divisions in alphabetical order.

3. The subject of the examination shall be one of the following:—

- (i) Mathematics.
- (ii) Physics.
- (iii) Chemistry.
- (iv) Zoology.
- (v) Botany.
- (vi) Geology.

4. The scope of the subject shall be as indicated in the Syllabus.

5. A “regular course of study” means attendance at not less than 75 per cent of the lectures and of the practical exercises constituting the course of study in a particular subject.



Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone shortage of attendance to the extent of six lectures and six practical classes in each subject, except in Mathematics, where the number shall be twelve lectures.

*(For Graduates in Science offering research in lieu of part of the M.Sc. Examination).*

Ordinances. 1. The permission to offer a dissertation shall be granted by the Dean of the Faculty on the recommendation of the Head of the Department concerned, and the names of such candidates shall be reported to the Registrar not later than the 1st September preceding the date of the examination.

2. The Selection of subject for the dissertation shall be made with the approval of the Head of the Department concerned.

3. Dissertation shall be submitted not later than 15th of March to the Dean, with the approval of the Head of the Department, who shall testify to their *bona fides*. Failing the approval of the Head of the Department, candidates may be permitted to appear in the theoretical paper.

4. Each candidate shall preserve for inspection all records and preparations which he may have made or any special apparatus which he may have employed, the course of his research.



## Doctor of Philosophy.

1. Application for permission to enter upon a course of study for the degree of Doctor of Philosophy must be made to the Faculty at the commencement of any University term through the Head of the Department concerned and the Dean of the Faculty of Science, mentioning the subject on which a candidate proposes to work.

The subject shall be approved by the Faculty at the first meeting of the Faculty during his second year of study.

2. A candidate for the degree of Ph. D. shall have taken the M. Sc. degree of this University or of any approved University.\*

3. A Master of Science of the Lucknow University or of any other approved University shall be required to have—

†(i) pursued his researches under the supervision of the University for six terms, which should be taken ordinarily in not more than three instalments, before presenting his dissertation; and

(ii) resided for six terms in the University or under conditions laid down for the residence of students. The Dean, on the

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\*For the list of approved Universities see Chapter VII.

†Provided, however, that if a student who has been admitted to the Ph. D. class for research in Palæobotany, applies for permission to pursue his research under the supervision of such member of the teaching staff of the Birbal Sahni Institute of Palæobotany as has been recognised by the University as a teacher for the purpose, he shall be permitted to do so on the recommendation of the Dean of the Faculty of Science and the Director of the Institute.



recommendation of the Head of the Department, may grant permission to a candidate to reside outside Lucknow for purposes of collecting material for his thesis for not more than two out of the six terms; such exemption shall not be granted either for the first term or for the last term.

4. Teachers and Research Assistants\* in the University, who hold the degree of M.Sc. in this or any other University, may be permitted by the Faculty to present a thesis for the degree of Doctor of Philosophy after three years service in the University. They will be required to notify the Registrar at least six months before the date on which they propose to present the thesis.

A teacher of a College or University who is a candidate for the Ph.D. of Lucknow may be permitted by the University to work at Lucknow during the summer vacation, provided adequate arrangements are made for supervision of his work; this period will be counted as one term.

5. A candidate will not be eligible to supplicate for the degree of Doctor of Philosophy unless he has obtained a Certificate of Proficiency in French, German or Russian of this or any other approved University.

6. A candidate for the degree of Doctor of Philosophy must submit three printed or type-written copies of the thesis, accompanied by the prescribed fees. He shall also submit a brief abstract of his thesis and indicate in a prefatory note what part of the thesis he claims as original and what sources he has used.

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\*"Research Assistant" means a person assisting a teacher in his research work and recognised by the Executive Council as such.



7. A thesis which has already been presented for the M.Sc. degree will not again be accepted for the degree of Doctor of Philosophy, but it may be wholly or partly included in an extended investigation, provided that the parts so included be clearly indicated. The thesis shall embody a definite contribution to scientific knowledge.

8. If the examiners consider the thesis to be of sufficient merit, they may recommend that the candidate should receive the degree without further examination or they may require him to undergo an examination, which may be written or oral or both, on the subject of his thesis.

9. The reports of examiners shall be laid before the Results Committee. If the Committee is satisfied that the reports of the examiners are unanimous and definite they may recommend to the Executive Council that the result be published. If, however, the reports show a divergence of opinion between the examiners, the Committee may direct that the reports be exchanged between them, the examiners being requested to submit a joint report, if possible. The Committee may, at its discretion, and shall, if the reports are conflicting even after an exchange of views, refer the thesis to another external examiner.

10. A printed or type-written copy of each accepted thesis shall be lodged in the University Library where it will be open to public inspection.

A summary of not more than 1,000 words shall also be furnished by the candidate to be published as the University may direct.



11. The dissertation submitted for the degree of Doctor of Philosophy shall be on some branch of one of the following Sciences:—

- (i) Physics.
- (ii) Chemistry.
- (iii) Botany.
- (iv) Zoology.
- (v) Mathematics.
- (vi) Geology.

### Doctor of Science.

- \*1. Applicants for the degree of Doctor of Science shall have taken the Ph.D. degree of the Lucknow University or of any other approved University not less than five years before submitting their work for the D.Sc. degree.
- Ordinances.

Provided that a candidate who has not taken the Ph. D. degree from this University shall have carried on research for not less than three terms under the supervision of the University.

The candidate shall notify to the Registrar at least six months before he proposes to submit his work.

*Exceptions.*—Teachers and Research Assistants, who have previously obtained the Master's degree and have been in the service of the University for not less than ten years may be permitted by the Faculty to supplicate for the D.Sc. degree without having first obtained the Ph. D. degree.

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\*These new Ordinances are in force from the Session 1937-38. The old Ordinances shall continue to apply to those students who had already joined the D.Sc. class before the Session 1937-38.



2. The degree shall be conferred on the basis of published work only. There shall be no practical or *viva voce* examination.

3. Joint work may be submitted in support of candidature, but the degree shall not be awarded solely on the basis of such work.

4. Work previously submitted by a candidate for the degree of M.Sc. or Ph.D. or both, may be submitted for the degree of D.Sc. provided the main results embodied in the thesis have been published in a recognised scientific journal. The examiners shall be informed about the portions of the work which have already been submitted and approved for a degree.

5. A candidate will not be eligible to supplicate for the degree of Doctor of Science, unless he has obtain a Certificate of Proficiency in French, German or Russian of this or any other approved University.

6. The reports of examiners shall be laid before the Results Committee. If the Committee is satisfied that the reports of the examiners are unanimous and definite, they may recommend to the Executive Council that the result be published. If, however, the reports show a divergence of opinion between the examiners, the Committee may direct that the reports be exchanged between them, the examiners being requested to submit a joint report, if possible. The Committee may, at its discretion, and shall if the reports are conflicting even after an exchange of views, refer the thesis to another external examiner.

In the case of candidates who supplicate directly for the D.Sc. degree, under the existing rules or under those prevailing prior to 1937, the Committee may ask the examiners to say whether in the event of their consider-



ing the thesis submitted to be of insufficient merit for the D.Sc. degree they would recommend that the lower degree of Ph.D. be awarded to the candidate.

7. A printed or type-written copy of each accepted thesis shall be lodged in the University Library where it will be open to public inspection.

A summary of not more than 1,000 words shall also be furnished by the candidate, to be published as the University may direct.

8. The dissertation submitted for the degree of Doctor of Science shall be on some branch of one of the following Sciences:—

- (i) Physics.
- (ii) Chemistry.
- (iii) Botany.
- (iv) Zoology.
- (v) Mathematics.
- (vi) Geology.

#### Doctor of Science (Honoris Causa)

Ordinance. The degree of Doctor of Science may be conferred as an Honorary degree in accordance with the provisions of Statute 14, upon any person, on the ground that he is by reason of eminent position and attainments or by virtue of his contribution to the cause of learning, a fit and proper person to receive such a degree.

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## *B.—SCHEME OF EXAMINATIONS.*

Ordinances.

**B.Sc. Pass.**

Physics, Botany, Zoology, Geology, Geography, Statistics  
and Physiology—

	Marks.
Two Papers, each	.... 40
Practical Test	.... 40
Class Tests	.... 30 (Theory 20 and Practical 10).

Chemistry—

Three Papers as follows:—

Physical Chemistry	.... 27
Inorganic Chemistry	.... 26
Organic Chemistry	.... 27
Practical Test	.... 40
Class Tests	.... 30 (Theory 20 and Practical 10).

Mathematics, Statistics and Astronomy—

Three Papers, each	.... 40
Class-Tests	.... 30

*Euthenics:*

A.—Applied Chemistry.—

Paper I. Nutrition	.... 32
Paper II. Biochemistry	.... 32
Paper III. Household Chemistry	... 24
Practical Test	.... 32
Class Tests	.... 30 (Theory 22 Practical 8)



	Marks.
B.—The Family.—	
Paper I. The Home ....	40
Paper II. Physiological Development ....	40
Paper III. Psychological and Sociolo- gical Deve- lopment ....	40
Class Tests ....	30

## C.—Living Science.—

Paper I. Household Physics and Engineering ....	32	
Paper II. Household Botany ....	32	
Paper III. Household Zoology ....	32	
Practical Test ...	24	
Class Tests ....	30	(Theory 24, Practical 6)

*Time allowed for each Paper—3 hours.*

Minimum pass marks in written work including Class Tests of each subject except in The Family ....	.... 33 per cent.
Minimum pass marks in Practical	.... 33 per cent.
Minimum pass marks in Class Tests in The Family ....	.... 33 per cent.
First division 60 per cent Second division 48 per cent Third division 36 per cent	} of the aggregate marks.



### B.Sc. Honours.

Chemistry, Botany, Geology and Zoology—

Marks.

Four Papers, each .... 100

Practical Test .... 200

Physics—

Five Papers, each .... 80

Practical Test .... 200

Mathematics—

Six Papers, each .... 100

*Time allowed for each Paper—3 hours.*

Minimum pass marks in written work of  
each subject .... 36 per cent.

Minimum pass marks in Practical .... 36 per cent.

*First* division 60 per cent

*Second* division 48 per cent

*Third* division 36 per cent

} of the total marks in  
the Honours subject.



## M. Sc. Part I.

Physics, Chemistry, Botany, Geology and Zoology—  
Marks.

Each Paper in Geology and  
Chemistry .... 100

Each Paper, in Physics, Botany  
and Zoology .... 75

Practical Test .... 200

Mathematics--

Five Papers, each .... 100

*Time allowed for each Paper—3 hours.*

Minimum pass marks in written work of  
each subject .... 36 per cent.

Minimum pass marks in Practical .... 36 per cent.

## M. Sc. Part II.

Physics, Chemistry, Botany, Geology and Zoology—  
Marks.

Each Paper in Geology and  
Chemistry .... 100

Each Paper in Physics, Botany  
and Zoology .... 75

Practical Test .... 200

Mathematics

Four Papers, each .... 125

*Time allowed for each Paper—3 hours.*

Minimum pass marks in written work of  
each subject .... 36 per cent.

Minimum pass marks in Practical .... 36 per cent.

First division in M.Sc., 60 per cent	}	of the aggregate marks on the com- bined results of Parts I and II.
Second division in M.Sc., 48 per cent		
Third division in M.Sc., 36 per cent		



## M.Sc.

Chemistry, Botany, Geology and Zoology—

Marks.

Three Papers, each .... 100

Practical Test .... 200

Physics—

Four Papers, each.... .... 75

Practical Test .... 200

Mathematics—

Four Papers, each.... .... 125

*Time allowed for each Paper—3 hours.*

Minimum pass marks in written work of  
 each subject .... 36 per cent.

Minimum pass marks in Practical .... 36 per cent.

*First* division 60 per cent  
*Second* division 48 per cent  
*Third* division 36 per cent

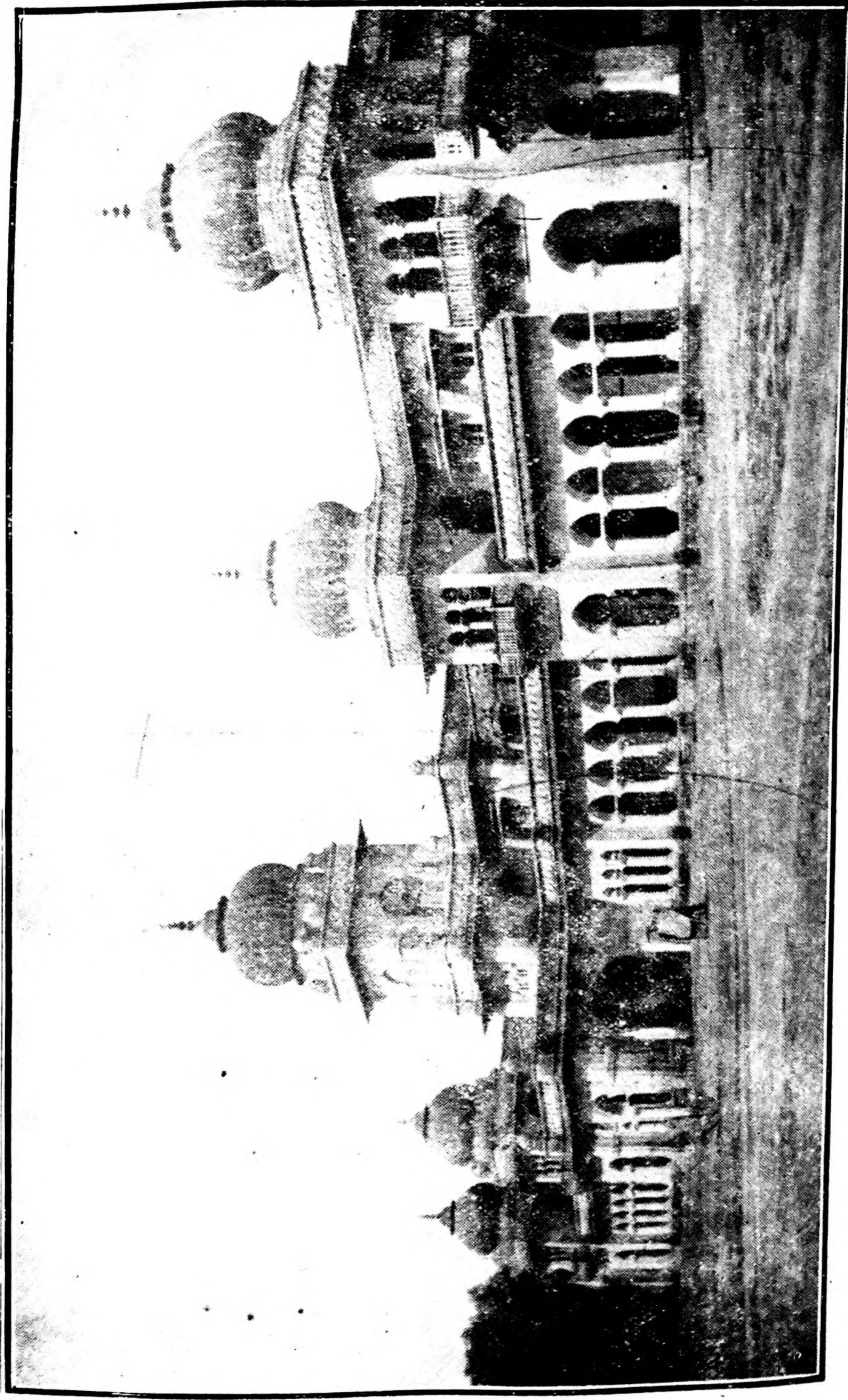
} of the aggregate marks.

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PHYSICS BLOCK, LUCKNOW UNIVERSITY.



*C—COURSES OF STUDY***PHYSICS****B.Sc. Pass***General Properties of Matter:*

Matter, mass, energy, units and dimensions. Use of dimensional equations. Laws of motion. S. H. M. Modern Hydraulic Press. Flow of liquids, Bernoulli's Theorem and its simple applications. Moment of Inertia and its evaluation in simple cases. Rotational Interia, radius of gyration, gyroscopes and their uses. Gravitation and determination of Gravitation constant. Attraction of a rod, disc and sphere. Gauss' Theorem. Gravitational potential and its calculation in simple cases. Equipotential Lines and Lines of force. Elasticity, Hooke's Law. Young's modulus, Bulk modulus and Rigidity. Bending of rods, cantilever, Poisson's Ratio. Surface Tension and Capillary phenomena. Methods of determining surface tension. Viscosity. Determination of viscosity of liquids and gases. Graham's Law of Diffusion of gases, Osmosis. Mean free path, Brownian Movement, Vacuum pumps and simple gauges.

*Sound:*

Production, propagation and perception of Sound. Nature and equation of wave motion. Composition of Vibrations. Distribution of Velocity and Pressure in Sound waves. Experimental determination of the velocity of Sound. Effect of Temperature, pressure, and humidity on the velocity of Sound. Forced vibrations and resonance. Reflection and refraction of Sound. Progressive and stationary waves. Doppler's Principle. Vibration of strings and air columns. Organ pipes. Interference and beats. Diffraction. Determination of frequencies. Human Ear. Consonance and dissonance.



**Musical Scales:** Characteristics of musical sound. Elementary ideas about sound ranging and echo-depth sounding. Elementary ideas about acoustics of buildings. Microphone and loud speaker. Recording and reproduction of sound. Elementary ideas about Ultrasonics.

### *Heat:*

Thermometry, Expansion of Solids (including crystals) liquids and gases. Calorimetry. Change of state. Vapour pressure. Mechanical equivalent of Heat. Kinetic Theory of Gases. Deduction of Gas Laws. Mean free path. Phenomena of conduction and viscosity. Convective equilibrium of the Atmosphere. Andrew's experiments Vanderwaal's Equations, Critical constants. Joule-Thomson's effect. Refrigeration. Liquefaction of gases. Air conditioning. Conduction of Heat. First and Second Law of Thermodynamics. Carnot's cycle. Carnot's Theorem. Indicator Diagram. Absolute Scale of Temperature. Internal Combustion Engines. Entropy and Law of Increase of Entropy, Thermodynamical relationships and their simple applications. Clapeyron's Equation, Triple point. Radiation. Kirchhoff's Law. Black Body. Stefan's Law. Simple ideas about the distribution of Energy in the spectrum of a black body.

### *Optics:*

Propagation of light. Photometry, mirrors, lenses and Prisms. Defects of mirrors and lenses. Thick lenses. Nodal points. Principal points and focal points. Rainbow.

Telescopes, microscopes and eye-pieces. Resolving power of telescope, microscope and prism.

Recent methods for the determination of velocity of light.



Dispersion. Spectra, their classification and origin. Elementary ideas about Bohr's Theory of Hydrogen spectrum. Infra red and ultra violet spectra.

Theories of Light with special reference to wave theory. Deduction of laws of rectilinear propagation, reflection and refraction by wave theory. Elementary ideas about photo-electric effect and its application.

Interference. Methods of producing interference fringes. Colour of thin films. Newton's rings. Interferometers with special reference to Michelson's Interferometer. Determination of wave length of light by interference methods. Standardisation of the meter. Colour photography.

Diffraction at a straight edge, narrow wire, slit, disc and circular aperture. Zone plate. Gratings. Resolving power of a grating.

Polarisation of light. Double refraction. Uniaxial crystal. Wave and ray velocities. Nichol prism. Quarter and half-wave plates. Plane, circularly and elliptically polarised light. Optical activity. Polarimeters. Phenomena of Rings and Brushes.

### *Electricity and Magnetism:*

Magnetic potential. Force between magnets Terrestrial Magnetism. Magnetic Induction. Permeability, Hysteresis. Elementary ideas about dia-para and ferromagnetism. Electromagnets.

Dielectrics. Polarisation. Electric Potential. Gauss' Theorem and its simple applications. Lines of force and Tubes of Induction. Capacities. Electrometers.

Ohm's Law, Wheatstone's net and its applications. Galvanometers. Ammeters and voltmeters. Resistance Bridges and potentiometers. Electrolysis. Galvanic cells and accumulators. Standard cells. Thermoelectricity.



Magnetic Shell. Field due to current. Magnetic flux. Growth and decay of current. Measurement of High resistances. Self and mutual induction. Induction coil. Oscillatory discharge of a condenser. Elementary Theory of Alternating Current. Dynamos and Alternators. D. C. Motors. Transformers. A. C. measuring instruments.

Elementary ideas about the Electromagnetic Theory of light. Hertzian waves. Triode Valve and its uses. Simple receiving circuits.

Conduction of electricity through gases Cathode rays, positive rays. Production, nature and properties of X-rays. Measurement of  $e/m$  and  $e$  of the electron. Elementary ideas about photo-electricity and Zeeman effect. Elementary Radio-activity. Simple facts about the atomic theory. Electrostatic and electro-magnetic systems of units.

### **Practical Course.**

#### *General Properties.*

1. Measurement of thickness of thin plates by Optical Lever.
2. Determination of Poisson's Ratio of India rubber by elastic tube method.
3. Determination of Young's modulus of a wire by Searle's apparatus.
4. Determination of the Rigidity of wire by the Statical method.
5. Determination of the Rigidity of a wire by the Dynamical method.
6. Determination of the moment of inertia by the method of Oscillations.



7. Measurement of the Surface Tension of water by Capillary rise.

8. Determination of the Surface Tension of water by Jaeger's methods.

9. Determination of Young's modulus of a bar by Flexure.

10. Determination of the Viscosity of water.

*Sound.*

11. Determination of velocity of sound by Kundt's tube.

12. Determination of the frequency of a fork by the method of falling plate.

*Heat.*

13. Determination of temperature of flame.

14. Determination of the Specific heat of a liquid by the method of cooling.

15. Measurement of the pressure Co-efficient of air.

16. Determination of the humidity of air.

17. Determination of the conductivity of a Copper rod.

18. Determination of the ratio of Specific heat of its air by Clement and Desorme's method.

19. Calibration curve of thermo-couple.

20. Measurement of melting point of solids by means of a thermo-couple.

21. Determination of the Specific heat of a solid by electrical method.



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*Light.*

22. Measurement of height with a Sextant.
23. Determination of refractive index of a prism by spectrometer.
24. Determination of refractive index of a liquid by total reflection.
25. Determination of the dispersive power of a prism.
26. Determination of the Wave-length of light by Diffraction Grating.
27. Determination of the variation of intensity of Illumination of lamp with different currents by Lummer-Brodhum photometer.
28. Determination of the wave-length of light by Newton's Rings.
29. Determination of the specific rotation of optically active solutions by Polarimeter.
30. Determination of the diameter of Lycopodium patrices by Corona Ring method.

*Magnetism.*

31. Determination of H by deflection Magnetometer.
32. Determination of H Earth Inductor.

*Electricity.*

33. Determination of Resistance by potentionmeter.
34. Measurement of the Resistance of a battery.
35. Measurement of the Resistance of a galvanometer.



36. Measurement of Specific Resistance and application of end-correction.

37. Comparison of two small Resistances by Carey-Foster's bridge.

38. Determination of the variation of Resistance of a glow lamp with different currents.

39. Determination of Mechanical Equivalent of heat electrically.

40. Determination of Mechanical Equivalent of heat by Callendar and Barne's Apparatus.

41. Calibration of Ballistic Galvanometer.

42. Comparison of capacities by Ballistic Galvanometer.

43. Determination of the Reduction factor of a Tagent Galvanometer.

44. Determination of the electro-chemical equivalent of Copper.

45. Determination of the Sensitivity of a Galvanometer.

46. Determination of melting point of solids by means of a platinum resistance thermometer.

47. To draw the characteristic curves of a Thermonic Valve.

48. Calibration of a milli-ammeter by Potentiometer.

49. Calibration of a Voltmeter by Potentiometer.

50. Determination of high resistance by Leakage method.

51. Determination of self-induction of a coil.

52. Determination of mutual induction.



### B.Sc. Honours.

The examination will consist of *five* papers in Theory and a Practical examination.

*Paper I—General Properties of Matter and Acoustics.*

*Paper II—Heat.*

*Paper III—Optics.*

*Paper IV—Electricity and Magnetism.*

*Paper V—Mathematics.*

The following syllabus in addition to that prescribed for the B.Sc. Pass will show the scope of work in different branches:—

*Paper I.—General Properties of Matter and Acoustics:*

*General Properties of Matter.*

Compound pendulum. Variation of  $J$ . Gravitation. Elasticity. Stability of loaded pillars. Spiral springs. Surface tension and capillarity. Thin films. Structure of Surfaces. Waves and ripples. Vapour pressure over a curved surface. Viscosity of liquids and gases. Lubrication. Brownian movement. Modern Vacuum pumps and gauges. Compression of liquids and gases.

*Acoustics:*

Fourier's Theorem and its application to plucked, struck and bowed strings. Velocity of Sound. Forced vibrations. Resonance. Reverberation and echoes. Noise and its measurement, Sound level-measurement. Architectural acoustics. Sound filters. Recording and reproduction of Sound. Sound ranging. Generation, Properties and uses of ultrasonics.



*Paper II.—Heat:*

Kinetic Theory of Gases. Transport phenomena. Phenomena in gases at low pressures. Equations of state. Conductivity. Heat Engines. Laws of Thermodynamics. Entropy. Thermodynamic formulas and applications. Joule-Thompson effect. Production and measurement of low and extremely low temperatures. Stefan's Law. Measurement of Stefan's constant. Wien's and Rayleigh-Jeans' Laws. Quantum Theory of Radiation. Pyrometry. Solar constant. Specific heats of solids and gases. Nernst's Heat Theorem and its applications. Phenomena at extremely low temperatures.

Boltzmann's statistics. Entropy and Probability. Liouville's Theorem. Classical distribution function. Absolute values of entropy and vapour pressure. Bose-Einstein statistics. Fermi-Dirac statistics and their simple applications.

*Paper III.—Optics:*

Systems of Lenses, Aberration and astigmatism. Dispersive power of optical systems. Interference and diffraction. Interferometers. Michelson's Echelon. Prism and grating spectrographs. Concave grating. Infra-red and ultra-violet spectroscopy. Polarisation. Interference of Polarised light. Theories of dispersion. Anomalous dispersion. Zeeman, Kerr and Faraday effects. Phosphorescence and fluorescence. Modern methods for determining Velocity of light. Michelson-Morely experiment and its significance. Electromagnetic theory of light. Molecular scattering. Raman effect. Quantum Theory of Line Spectra. Intensity and polarisation of spectral lines. Principles of correspondence and selection. Excitation potentials. Band spectra.



*Paper IV.—Electricity and Magnetism:*

Gauss' Theorem and its applications. Dielectric constant and its measurement. Theories of molecular polarisation. Dipole moments. Method of electrical images and its simple applications.

Electrolysis. Concentration cells. Thermo-electricity.

Permeability and magnetic induction. Langevin's theories of Diamagnetism and Paramagnetism. Application of quantum theory to Paramagnetism. Bohr and Weiss magneton. Ferromagnetism. Heisenberg's and Bloch's theories of Ferromagnetism. Stern-Gerlach's experiment.

Production and measurement of intensive magnetic fields and high voltages. Low and high resistances. Potentiometers. Self and mutual inductance.

Transfoamers and Chokes. Alternating currents A. C. measuring instrument and bridges.

Charge and discharge of a condenser. A. C. circuits containing L, C and R.

Conduction of Electricity through gases. Lorentz theory of the electron.

Determination of  $e/m$  and  $e$ . Positive Ray analysis. Elementary ideas about radio-activity. (X-rays, their production and properties). Scattering of X-rays. Compton Effect. Bragg's Law.

Theories of metallic conduction.

*Paper V.—Mathematics:*

Differential equations: Linear equations with variable co-efficients. Method of variational parameters. Partial Differential equations of the second order.



Solution in Power series around singular points, Legendre and Bessel's equations.

Polynomials. Multiple equations. Beta and Gamma function.

Functions of complex variable, Taylors' and Laurant expansions. Cauchy's theorem. Cantour integral. Laplace's equation.

Expansion of functions and series of orthogonal function. Fourier series.

Elementary theory of Probabilities. Methods of Interpolation. Theory and calculation of Errors. Hamilton, Jacobi, and Legranges' equations. Legranges' Normal co-ordinates.

Co-ordinate Geometry of three dimensions. Equations of straight lines. Solution of Spherical triangles.

### **Practical Course.**

The following Course is in addition to that prescribed for the B.Sc. Pass:—

1. Determination of Rigidity by Maxwell's needle.
2. Measurement of viscosity of fluids by coaxial cylinders.
3. Measurement of Mechanical equivalent of heat by Callendar's apparatus.
4. Measurement of Noise.
5. Measurement of the E. M. F. of a thermocouple.
6. Measurement of high temperature by Platinum resistance thermometer.



7. Determination of Stefan's constant by the method of concentric spheres.
8. Determination of thermal conductivity by Lee's method.
9. Determination of the refractive indices of glass and liquids by the method of total reflection.
10. Measurement of the refractive index of Air by Rayleigh refractometer.
11. Measurement of wave-length of light by Fresnel's biprism.
12. Measurement of wave-length of sodium light, and refractive index and thickness of thin plates by Michelson's interferometer.
13. Determination of wave-length by a plane reflection grating.
14. Photographing spectra and determination of wave-length.
15. Photographing spark spectra and determination of wave-length.
16. Study of Raman effect of liquid.
17. Measurement of  $e/m$  by Zeeman Effect.
18. Measurement of low resistances.
19. Measurement of resistance of an electrolyte by Kohlrausch's bridge.
20. Comparison of capacities by De Sauty's method.
21. Measurement of self-inductance by Anderson's method.



22. Measurement of magnetic susceptibility of a liquid.
23. Plotting of the hysteresis curve of a sample of iron.
24. Plotting of the characteristic curves and determination of the constants of a triode valve.
25. Determination of the static characteristics of a gas filled triode.

### M. Sc. Part I.

The examination will consist of *four* papers and a Practical examination:—

*Paper I—General Properties of Matter and Acoustics.*

*Paper II—Heat.*

*Paper III—Optics.*

*Paper IV—Mathematics.*

Candidates are expected to acquaint themselves with current scientific literature.

*Paper I.—General Properties of Matter and Acoustics:*

Compound Pendulum. Variation of  $g$ . Gravity Balances. Gravitation. Elasticity. Elastic curves. Stability of loaded Pillars. Spiral Springs. Capillarity. Surface Tension phenomena. Soap Films. Structure of surface. Waves and Ripples. Viscosity of liquids and gases. Steady and Turbulent flow. Lubrication. Brownian movement. Modern Vacuum pumps and gauges. Compression of liquids and gases.



Fourier's Theorem and its application to plucked, struck and bowed strings. Velocity of Sound. Forced Vibrations. Resonance. Reverberation and echoes. Noise and its measurement. Sound-level measurement. Acoustics of Buildings. Filters. Transmission. Recording and reproduction of sound. Sound Ranging. Echo-depth Sounding, Ultrasonics, their properties and applications.

*Paper II—Heat:*

Kinetic Theory of Gases. Transport phenomena of gases at low pressures. Equations of state. Heat engines. Laws of Thermodynamics. Entropy. Thermodynamic formulæ and their applications. Joule-Thompson's Effect. Equilibria of systems. Stefan's Wien's and Rayleigh-Jeans Laws. Quantum Theory of Radiation. Radiation Pyrometry. Solar Constant. Theories of Specific Heat of Solids and Gases. Nernst Heat theorem and its applications. Production and Measurement of low temperatures. Phenomena at extremely low temperatures.

Boltzmann's Statistics, entropy and probability. Phase space. Liouville's Theorem. Maxwell-Boltzmann distribution function. Absolute Values of Entropy and Vapour pressure. Chemical Constant. Bose-Einstein Statistics, Fermi-Dirac Statistics and their simple applications.

*Paper III—Optics:*

System of Lenses. Resolving and Dispersive Power of Optical Systems. Interference and diffraction. Michelson's Interferometer, Lummer-Gehrcke plate, Fabry and Perot Etalon, Michelson's Echelon. Prism and Grating Spectrographs. Concave Grating. Infra-red and ultra-violet spectrascopy. Polarisation. Interference of



polarised light. Theories of Dispersion. Anomalous Dispersion. Zeeman, Kerr and Faraday Effects. Phosphorescence and fluorescence. Modern Methods for the determination of velocity of light. Michelson-Morely expt. and its significance. Elementary Electromagnetic Theory of Light. Molecular Scattering, Raman Effect. Quantum Theory of Line Spectra. Intensity and Polarisation of spectral lines. Correspondence and selection principles. Excitation potentials. Band Spectra.

*Paper IV—Mathematics:*

(The same course as in Paper V of B.Sc. Honours.)

### **Practical Course.**

1. Determination of rigidity by Maxwell's method.
2. Determination of Young's modulus of a rod by the method of interference fringes.
3. Determination of viscosity of fluids by rotating Cylinder method.
4. Determination of viscosity by the method of damping.
5. Determination of Acoustic Impedance.
6. Measurement of Noise.
7. Determination of  $J$  by Callendar's apparatus.
8. Measurement of E. M. F. of Thermocouple.
9. Determination of high temperature by means of Platinum resistance thermometer.
10. Determination of Stefan's Constant by the method of concentric spheres.
11. Determination of Stefan's Constant by Pyro-heliometer.



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12. Determination of Thermal Conductivity by Lee's method.

13. Measurement of refractive index of Air by Rayleigh's refractometer.

14. Determination of refractive index of glass and liquids by Total Reflection.

15. Determination of refractive index of liquids by Newton's rings.

16. Measurement of wave-length by Fresnel's bi-prism.

17. Measurement of wave-length, refractive index and thickness of thin plates by Michelson's Interferometer.

18. Determination of wave-length by plane reflection grating.

19. Measurement of  $e/m$  by Zeeman Effect.

20. Photographing the spectra and measurement of the wave-length lines by using Hartmann's formula.

21. Photographing Spark Spectra and determination of wave-lengths with Quartz Spectro-graph.

22. Photographing of Raman Spectra of liquids and determination of Raman frequencies.

23. Study of Absorption spectra of solutions.

24. Study of the Anomalous dispersion of Sodium Vapour.



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**M.Sc. Part II.**

The examination will consist of *four* papers and a Practical examination :

*Paper I—Atomic Physics (a)*

*Paper II—Atomic Physics (b)*

*Paper III—Electricity and Magnetism.*

*Paper IV*--One of the following subjects chosen with the approval of the Head of the Physics Department:—

- (1) Wireless Telegraphy and Telephony.
- (2) Atomic and Molecular Magnetism.
- (3) Spectroscopy.
- (4) X-rays.

Candidates are expected to acquaint themselves with current Scientific literature.

*Paper I—Atomic Physics (a):*

Bohr-Sommerfeld Theory of the Atom. Fine structure of the hydrogen lines. Optical spectra of the alkalis and the alkaline earths. Multiplet structure. Penetrating and non-penetrating orbits. Quantum defects. Vector model of the atom. Different types of coupling. Anamolous Zeeman Effect. Paschen-Back Effect. Stark Effect. Critical Potentials of the Atom. Hyperfine structure. Isotopes. Mass Spectrograph. Stern-Gerlach experiment. Variation of mass with velocity.

X-ray Spectra. The spin and screening doubles. Atomic Structure.

Molecular spectra of simple molecules. Heat of dissociation. Isotopic effect in molecular spectra. Chemical Valency. Spectroscopic Law of Displacement. Structure of the Molecules from Raman Effect.



Photo-electricity. Photo-conductivity. Lorentz Theory of the electron. Measurement of  $e/m$  and  $e$ . Positive Ray analysis.

*Paper II.—Atomic Physics (b):*

Diffraction of Electron Wave. Electron Microscope. Matter Waves. Uncertainty Principal. Schrodinger's Wave equation and its simple applications. Matrices. Wave-mechanics of the Hydrogen atom. Theory of Perturbations. Wave-mechanical model of the hydrogen molecule. Theory of dispersion. The helium problem. Transition probabilities.

Elementary ideas of Dirac's theory of radiation and of electron. Negative energy states. Pair production.

Alpha, beta and gamma rays. Radioactive disintegration. Wilson Cloud Chamber. Geiger-Muller counter and system of counters. Nuclear structure. Charge mass, spin and magnetic moment of the nucleus. Statistics of the nuclear particles. Nuclear energy levels. Methods of producing high speed-particles. Cyclotron, betatron. Scattering of elementary particles and of gamma rays. Inelastic scattering. Artificial disintegration, resonance capture. Nuclear reactions. Nuclear fission and chain reactions. Theories of nuclear structure. Beta ray decay. Theory of fundamental particles.

Cosmic radiation. Latitude effect. East-West and North-South effect. Effect of altitude. Origin, nature and theories of cosmic rays. Showers and bursts. Rossi curves. The mesotron and its properties.

*Paper III.—Electricity and Magnetism:*

Gauss' Theorem and its applications. Vector Analysis—differentiation of Vector's, gradient curl and divergence. Stokes, Poynting and Laplace's equations and Green's theorem. Irrotational, solenoidal and general



field and their applications. Dielectric Constant. Theories of Molecular Polarization. Permanent dipole moments. Methods of electrical images and its simple applications.

Theories of Earth's magnetism.

Permeability and magnetic induction. Larmor Precession of atoms in a magnetic field. Langevin's theory of diamagnetism. Paramagnetism. Bohr and Weiss magneton. Theories of paramagnetism. Ferromagnetism. Elementary ideas about ferromagnetism. Production and measurement of high magnetic fields and high voltages.

Transformers and chokes. Alternating currents. Induction and synchronous motors. A. C. measuring instruments and bridges.

A. C. circuits containing L, C and R.

Electrolysis. Concentration cells. Debye-Huckel's Theory of Electrolytes. Thermo-electricity. Piezo-electricity and quartz oscillators. Theories of metallic conduction. X-ray and their properties. X-ray tubes. H. T. Generators. Compton effect. Bragg's Law.

*Paper IV--(1):*

(1) *Wireless Telegraphy and Telephony:*

History and development of Wireless; Electromagnetic waves and their propagation; High frequency and Ultra high frequency Oscillatory circuits; Skin Effect; Coils and Condensers; Resonant Circuits; Capacitative and Inductive Couplings; Wave Filters. Attenuators.

Emission of Electrons; Richardson's Law; Vacuum Tube Characteristics and Constants; Power and Crystal Oscillators; U. H. F. Oscillators; Magnetron Oscillators; Klystrons.



Modulation: types and methods; frequency modulation; Broadcast and short wave transmitter; Power supply system; Wave meters; Field Strength measurement; Cathode ray Oscillography; Vacuum Tube Voltmeters and their applications.

Detection: Characteristics and working.

Classification of amplifiers; Distortion; A. F. Voltage and Power amplifiers.

Classification and characteristics of receiving systems; H. F. and U. H. F. receivers; adjustment and tuning of receivers; Fault location; Microphones, Pickups and Loudspeakers; Public address systems.

Basic Principles of Radiation; Antenna Characteristics, Constants and their measurement; Types of antenna and Antenna Arrays; Transmission Lines and Feeders; Wave guides and Resonators: Network Theorems.

Directional reception; Polar diagrams and directional transmission; Radar and Television. Radio direction finding.

Propagation of radio Waves; Structure of the Ionosphere; Reflection and refraction in Ionospheric layers; Skip-distance; Methods of Ionospheric investigation. Fading Atmospherics.

*Or* (2) Atomic and Molecular Magnetism.

Methods of producing and measuring magnetic fields. Strong magnetic fields. Susceptibility measurements. Magnetic balance. Theories of dia and para-magnetism. Magnetism and Valency. Applications Para-magnetic



theory to the salt of the transition groups and the rare earths. Free Electron magnetism. Magnetism and Crystalline structure. Ferror-magnetic theories. Gyromagnetic Effect. Cotton-Moutine Effect. Faraday Effect. Stern-Gerlach Expt. Bohr and Weiss magnetons.

*Or* (3) Spectroscopy.

Prism and grating spectrosopes of various types. Concave grating. Vacuum spectrographs. Methods of producing spectra. Measurement of wave length. Infra-red and ultra-violet spectroscopy. Hot spark spectra. Intensity and Polarisation of spectral lines. Distribution of electrons in the various shells of the atom. Spectra of atoms with two or more valence electrons. Hyperfine-structure. Band spectra. Spectroscopic law of displacement. Correspondence Principle Theories of Dispersion and absorption. Structure of the molecules from Raman Effect. Applications of wave-mechanics to simple systems.

*Or* (4) X-Rays.

Various types of X-ray tubes. High tension installations. Electromagnetic and the wave-mechanical Theory of the Production of X-rays. Properties of X-rays. Probability of ionisation by electron impact. X-ray emission by thick and thin targets. Stoke's Thomson Pulse Theory. Classical and Quantum Theories of the continuous spectrum.

Scattering of X-rays. Thomson's Theory. Scattering by solids, liquids and gases. Compton Effect. Wave-mechanical theory of Scattered rays. The complex dielectric constant. Refractive index and its measurement. Atomic Structure Factor. Absorption of X-ray.



External and Internal symmetry of crystals. Space Lattices, and Space Groups. Diffraction of X-rays by crystals. Lane's Equations Bragg's Law. Crystal structure. Analysis-methods of Lane and Debye-Shearer. Crystal Structure Factor.

Reflection of X-rays from crystals. Diffraction by a perfect crystal Measurement of absolute intensities in X-ray reflection. Atomic Structure factor curves and their Fourier analysis. Ionisation of gases by X-rays. Fluorescence yield. Magnetic spectra of the electrons.

X-rays emission and absorption spectra. Energy level diagrams. Regular and irregular doublets. Screening constant. Non-diagram lines. Absorption edges and their structure. Spectroscopy of Soft X-rays.

Correction of Bragg's equation. Methods of the absolute measurement of Bragg angle. Determination of the wave-length. Focussing X-ray spectographs. Determination of  $e$  and  $h$ .

### Practical Course.

#### *Atomic Physics.*

1. Determination of  $e/m$  by Cathode-ray tube.
2. Determination of  $e$  by Hoag-Millikan's apparatus.
3. Determination of mass-absorption co-efficient for rays from radioactive substances.
4. Determination of characteristic curves of photo-electric cell.
5. Determination of Planck's Constant by photo-electric cell.



6. Determination of dielectric constant at different temperatures and dipole moments.
7. Determination of the hyperfine structure of spectrum lines.
8. Verification of Richardson's Law.
9. Use of Geiger-Muller Counter.

*Electricity and Magnetism:*

1. Measurement of capacity by De Sauty's method.
2. Measurement of capacity and mutual inductance by Drysdale's bridge.
3. Measurement of self-inductance by Anderson's method.
4. Measurement of low resistance.
5. Measurement of conductivity of solutions by Kohlrausch's bridge.
6. Plotting of the hysteresis curve of a sample of iron.
7. Plotting the hysteresis curve of a sample of iron with the help of a cathode ray oscillograph.
8. Determination of magnetic susceptibility of liquids.
9. Determination of capacity and dielectric constant by Capacity Bridge.

AND

Experiment from one of the following groups corresponding to the special paper chosen:



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(1) *Wireless Telegraphy and Telephony.*

1. Plotting of the static and dynamic characteristics of a triode and determination of its Power factor and constants.
2. Determination of the static characteristic constants of (a) Screen grid and (b) Pentode Valves.
3. Measurement of the voltage amplification of the triod when used as:—
  - (a) A capacitance coupled resistance amplifier.
  - (b) A capacitance coupled inductance amplifier.
  - (c) A transformer coupled amplifier.
  - (d) A tuned anode amplifier.
4. Determination of the alternating current method of:
  - (a) Geometric amplification factor of a valve and its variation with plate voltage and filament current.
  - (b) True amplification factor and its variation with external resistance in the plate circuit.
  - (c) Internal impedance of the valve and its variation with filament current and plate voltage.
5. Measurement of the natural wave-length, inductance, capacity and resistance of an aerial.
6. Setting up of a triod valve as a voltmeter.
7. Measurement of the resistance at Radio frequencies.



8. Measurement of the Sensitivity and Selectivity of a Radio Receiver.

9. Determination of the over-all frequency response of a Radio Receiver.

10. Setting up of a Speech amplifier and determination of its frequency response and gain.

11. Determination of the frequency response and polar characteristics of a Loud Speaker.

12. Setting up and adjustment of medium and short wave-transmitters for maximum efficiency.

(2) *Atomic and Molecular Magnetism:*

1. Measurement of magnetic susceptibilities and determination of Weiss magneton Number.

2. Measurement of field strengths by Zeeman Effect.

3. Measurement of magnetic field by susceptibility method.

4. Measurement of Joule Effect.

5. Determination of magnetic susceptibility of solids.

6. Determination of magnetic permeability.

(3) *Spectroscopy:*

1. Photographing the ultra-violet region and identification of lines.

2. Measurement of Zeeman Effect by Fabry and Perot Etalon and Michelson's Echelon.

3. Study of absorption spectra of liquids.

4. Study of Raman Effect of solids and liquids.

5. Measurement of hyperfine-structure of spectrum lines.



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(4) *X-rays*:

1. Calibration of an electrometer and determination of the mass absorption co-efficient of X-rays.
2. Determination of the crystal structure by Laue's method.
3. Determination of the crystal structure by Debye Shearer method.
4. Determination of wave-length by the method of rotation spectra.
5. Study of the X-ray scattering.
6. Determination of the wave-lengths of the absorption edges.

**M.Sc.**

*(For Graduates with Honours in Physics)*

The examination will consist of *four* papers and a Practical examination:—

*Paper I—Atomic Physics (a).*

*Paper II—Atomic Physics (b).*

*Paper III—* { Two of the following subjects chosen, subject to the approval of the Head of the  
*Paper IV—* { Department of Physics.

- (1) Spectroscopy.
- (2) X-rays.
- (3) Wireless Telegraphy and Telephony.
- (4) Atomic and Molecular Magnetism.



(5) Electro-magnetic Theory of Light.

(6) Theory of Relativity.

(7) Thermodynamics and Statistics.

Candidates are expected to acquaint themselves with current scientific literature.

*Paper I.—Atomic Physics (a).*

(The same Course as in M.Sc. Part II).

*Papers III and IV.—*

1. *Spectroscopy:*

(The same course as in M.Sc. Part II).

2. *X-rays:*

(The same course as in M.Sc. Part II).

3. *Wireless Telegraphy and Telephony:*

(The same course as in M.Sc. Part II).

4. *Atomic and Molecular Magnetism:*

(The same course as in M.Sc. Part II).

5. *Electro-magnetic Theory of Light:*

Maxwell's electro-magnetic equations. Elementary Vector Analysis. Poynting's Theorem. Green's Theorem. Laplace's equation. Reflection and refraction of electro-magnetic waves. Ratio of electrostatic to electro-magnetic units. Electro-magnetic waves in anisotropic media. Reflection at metallic surface. Dielectrics. Dielectric Polarisation. Theory of metallic absorption. Determination of reflection co-efficient from emission. Determination of refractive index and absorption co-efficient.



## 6. *Theory of Relativity:*

Motion through ether. Aberration of light Ether. drag, Michelson-Morley experiment. Electrodynamics of moving bodies. Special theory of Relativity. Lorentz-Fitzgerald transformation. Einstein time dilatation, space-time continuum. Generalised expression for Newton's second law of motion. Variation of mass with velocity. Inertia and energy. Applications of the special theory to electrodynamics and thermodynamics.

General Theory of Relativity. Principles of Covariance and equivalence. Gravitational fields. Simple applications of the General theory. Shift in spectral lines.

## 7. *Thermodynamics and Statistics:*

Laws of Thermodynamics. Entropy. Thermodynamic formulæ and their applications. Thermodynamic functions. Thermodynamics of Heterogeneous systems. Mixtures of perfect gases. Le Chatelier Braun principle. Application of the phase Rule. Chemical Equilibria. Electro Chemical Systems. Nernst Heat Theorem. Adiabatic Demagnetisation and production of extremely low temperatures. Liquid Helium II.

Statistical interpretation of entropy. Boltzmann's H. theorem. Maxwell-Boltzmann's Statistics. Vapour pressure and chemical constant. Mean energy of Oscillators. Application of Maxwell-Boltzmann's method to the specific heat of solids and to Radiation.

Bose-Einstein statistics. Cases of slight and extreme determination. Calculation of pressure and energy. Application to conduction electrons. Statistical interpretation of the principles of thermodynamics. Analogues of the first and second laws of thermodynamics.



**Practical Course.***General.**Atomic Physics:*

(The same course as in M.Sc. Part II)

*Special.*

(1) *Spectroscopy:*

(The same course as in M.Sc. Part II)

(2) *X-rays:*

(The same course as in M.Sc. Part II)

(3) *Wireless Telegraphy and Telephony:*

The following experiments are in addition to those prescribed for M.Sc. Part II:—

(1) Setting up of a valve as

(a) Anode bend detector

(b) Cumulative grid detector.

(2) Calibration of a wave meter for short waves by Lecher wires.

(3) Plotting of characteristic curves of a valve by means of a cathode ray Oscillograph.

(4) Plotting of the hysteresis curves of a sample of iron by a cathode ray Oscillograph.

(4) *Atomic and Molecular Magnetism.*

(The same course as in M.Sc. Part II).

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## CHEMISTRY

B.Sc. Pass.

(For the Examinations of 1952 and after)

The examination will consist of *three* papers and a practical examination:—

*Paper I.—Physical Chemistry.*

*Paper II.—Inorganic Chemistry.*

*Paper III.—Organic Chemistry.*

The following syllabus is prescribed:—

### *Physical Chemistry.*

1. Classification of matter, laws of quantitative chemistry, historical account of the atomic theory. Avogadro's hypothesis, determination of atomic and molecular weights.

II. Structure of matter. Elementary treatment of crystal structure. Kinetic theory of gases, van der Waal's equation, liquefaction of gases. Properties of liquids and surface tension.

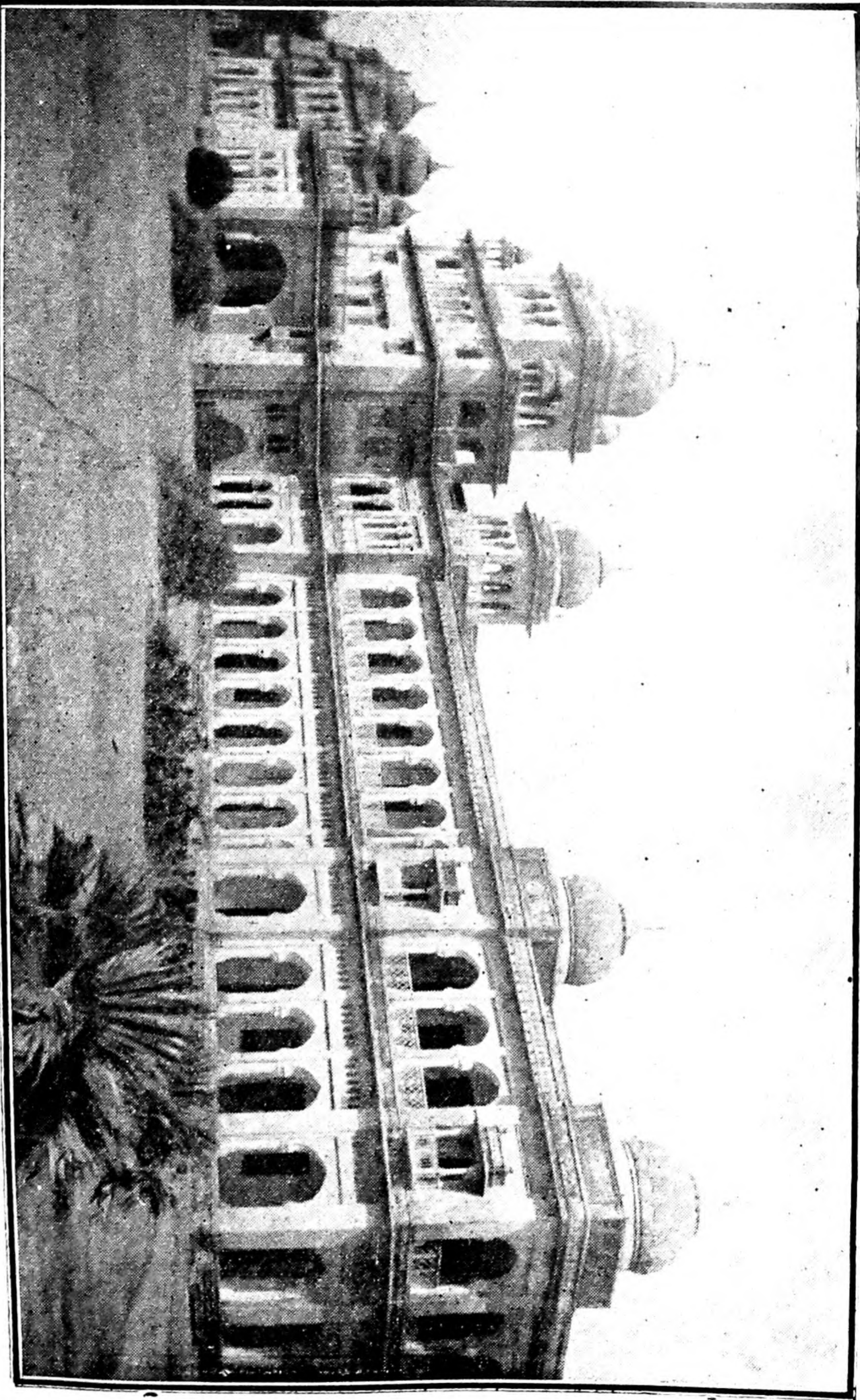
III. Law of mass action, dynamics of chemical change, reversible reactions, reaction velocity, order of a reaction.

IV. Elementary treatment of thermo-chemistry.

V. Nature of solution, osmotic pressure, vapour pressure, determination of freezing and boiling points, dissociation theory, laws of electrolysis, osmotic pressure, of electrolytes and electrical conductivity.

VI. Ostwald's dilution law, ionisation of water, acids and bases, heat of neutralisation, basicity of acids, hydrolysis, indicators.





CHEMISTRY BLOCK LUCKNOW UNIVERSITY.







VII. Elementary ideas of E. M. F.

VIII. Elementary treatment of phase rule. Distribution law.

IX. Elements of colloid and surface chemistry.

X. Hetrogeneous catalysis.

XI. Radioactivity and fundamental ideas of atomic structure. Periodic table. Electronic theory of valency.

XII. Elements of spectrum analysis.

### *Inorganic Chemistry.*

Study of the elements from the point of view of the periodic classification and a study of the following elements and their compounds in detail:—

Elements of the zero group, hydrogen, lithium, sodium, potassium, copper, silver, gold, beryllium, magnesium, zinc, cadmium, mercury, calcium, strontium, barium, boron, aluminium, thallium, carbon, silicon, tin, lead, titanium, nitrogen, phosphorus, arsenic, antimony, bismuth, oxygen, sulphur, selenium, tellurium, chromium, molybdenum, tungsten, fluorine, chlorine, bromine, iodine, manganese, iron, cobalt, nickel, palladium, platinum.

An elementary knowledge of the principles of large-scale chemical processes will be expected.

### *Organic Chemistry.*

The paraffins and their simpler derivatives, *viz.*, halogen derivatives, alcohols, aldehydes, ketones, monobasic acids and their derivatives.



The ethers, esters, amines, glycols, hydroxy acids, dicarboxylic acids, glycerol, maleic and fumaric acids, cyanogen compounds and their derivatives, urea and the simple carbohydrates.

The unsaturated hydrocarbons and their general properties.

Benzene, toluene and their simple substitution products, aromatic amines and their derivatives, diazo compounds, phenols, aromatic alcohols, aldehydes and ketones, aromatic mono and dibasic acids, hydroxy acids and their derivatives, pyridine, naphthalene, and their simple derivatives.

Elementary ideas on stereochemistry and geometrical isomerism.

#### *Practical Examination:*

*Inorganic Chemistry.*—The systematic analysis of mixtures of substances containing not more than six radicals.

Simple gravimetric estimations which do not involve separation.

Simple volumetric analysis and standardisation of solutions.

#### **B.Sc. Preliminary.**

*(For the Examinations of 1952 and after)*

#### *Physical Chemistry.*

1. Laws of chemical combination.
2. Atomic theory and atomic weights.
3. The classification of elements, periodic law, elementary treatment of the constitution of the atom, electronic theory of valency.



4. The gaseous state of matter, ideal gases kinetic theory, fundamental equation of the kinetic theory, diffusion of gases, specific heats, vapour density, molecular weights and thermal dissociation of gases.
5. Real gases, liquefaction of gases, van der Waals' equation and critical phenomenon.
6. The liquid state of matter, vapour pressure, surface tension, molecular weights of pure liquids, viscosity.
7. The crystalline solid, elementary ideas of crystal structure.
8. The relation between physical properties and chemical constitution.
9. Solutions, gases in gases, gases in liquids, gases in solids, binary liquid mixtures of completely miscible, partially miscible and immiscible liquids, distillation of such mixtures, steam distillation, solubility of solids in liquids, etc.
10. The laws of dilute solutions, osmotic pressure, its measurement, related properties, determination of molecular weights in solutions

### *Inorganic Chemistry.*

Study of the elements from the view point of the periodic classification and a study of the following elements and their compounds in detail:—

- (a) Elements of the zero group.
- (b) Hydrogen and oxygen.
- (c) Fluorine, chlorine, bromine, and iodine.
- (d) Lithium, sodium, potassium, copper, silver and gold.



(e) Beryllium, magnesium, calcium, strontium and barium.

(f) Zinc, cadmium and mercury.

An elementary knowledge of the principles of industrial processes will be expected.

### *Organic Chemistry.*

The paraffins and their simple derivatives, viz. halogen derivatives, alcohols, aldehydes, ketones, monobasic acids and their derivatives.

The ethers, esters, amines, glycols, hydroxy acids, dicarboxylic acids, glycerols, maleic and fumaric acids and their derivatives. Urea and simple carbohydrates. The unsaturated hydrocarbons and their general properties.

Elementary ideas on stereo-chemistry and geometrical isomerism.

### *Practical Examination:*

*Inorganic Chemistry:*—The systematic analysis of mixtures containing not more than six radicals.

Gravimetric estimations of the following radicals:—

(1) Ba, (2)  $\text{SO}_4$ , (3) Zn, (4) Ag and (5) Cl.

N. B.—It is pointed out that the B.Sc. Pass course will comprise the entire course as given in the prospectus and will include that of the B.Sc. Preliminary.



## B.Sc. Honours.

(For the Examinations of 1952 and after)

The examination will consist of four papers and a Practical examination:—

*Paper I.—General and Physical Chemistry.*

*Paper II.—Inorganic Chemistry.*

*Paper III.—Organic Chemistry.*

*Paper IV.—Additional General and Physical Chemistry.*

Or

*Additional Inorganic Chemistry.*

Or

*Additional Organic Chemistry.*

*Inorganic and General Chemistry.*—Chemistry of the elements and their compounds treated in greater detail than in the Pass course.

Metallurgy and technical applications of metals of industrial importance.

History of chemical theory.

Elements of physical chemistry and electro-chemistry, chemistry of colloids.

### *Organic Chemistry.*

1. Aliphatic hydrocarbons and their derivatives treated in greater detail than in the B.Sc. Pass course.

2. Aromatic hydrocarbons and their simple derivatives. Quinones and their simple derivatives.



3. Azo and triphenylmethane group of dyes, indigo and alizarine.

4. Carbohydrates: a detailed study of monosaccharides including synthetic preparation, constitution and photo synthesis.

A general study of di and polysaccharides.

5. Amino acids and Polypeptides.

6. Camphor and simpler monocyclic terpenes, *viz.* terpineol, dipentene, terpinolene, cineol and menthol.

7. Furane, thiophene, pyrrole, indole and their simple derivatives, purine and its derivative, pyridine, quinoline and isoquinoline.

8. Vitamins A, B, C, D, E—General knowledge of these vitamins excluding structure and synthesis.

9. Alkaloids—1. With a pyrrole nucleus *viz.* hygrine, nicotine.

2. With a pyridine nucleus *viz.* conine, trigonelline, piperine and ricinine.

3. With an isoquinoline nucleus *viz.* papaverine.

### *Practical Examination:*

*Inorganic Chemistry.*—Ordinary methods of qualitative and quantitative analysis excluding technical methods and separation of rare metals.

A general course of inorganic preparations. Simple physico-chemical measurements and elementary gas analysis.



Simple electrolytic preparations and electro-chemical analysis.

*Organic Chemistry.*—Preparations illustrating the synthetic methods of organic chemistry.

Identification of organic substances containing C, H, O, N only.

### M.Sc. Part I.

*(For the Examinations of 1952 and after)*

The examination will consist of *three* papers and a practical examination:—

*Paper I.—Inorganic Chemistry.*

*Paper II.—Organic Chemistry.*

*Paper III.—Physical Chemistry.*

*Inorganic Chemistry.*—A fuller treatment of the B.Sc. syllabus in Inorganic Chemistry together with a systematic knowledge of less common elements and their compounds. Metallurgy and technical application of metals of industrial importance.

*Practical Inorganic Chemistry.*—Systematic analysis of a mixture of substances containing not more than seven radicals. Gravimetric estimations which do not involve more than one separation. Volumetric analysis. Simple inorganic preparations.

*Organic Chemistry.*—Fuller treatment of the B.Sc. syllabus in Organic Chemistry.

Aceto-acetic ester; amino acids and proteins; urea and its derivatives; uric acids and its derivatives; polymethylenes and their derivatives; carbohydrates.



Reduction products of nitrobenzene; benzidine, phenylmethanes, quinones, anthracene and phenanthrene and their derivatives; the simpler heterocyclic compounds; a general treatment of the azo, triphenylemethane, and phthalein groups of dyes; alizarin, indigo; the simpler monocyclic terpenes; pyridine, quinoline and isoquinoline, alkaloids, piperine, coniine, nicotine, papaverine.

Stereochemistry of carbon and nitrogen, geometrical isomerism, tautomerism; life and work of chemists.

*Practical Organic Chemistry.*—Identification of organic compounds; separation; preparation of organic compounds.

*Physical Chemistry.*—A fuller treatment of the B.Sc. course together with the following:—

1. Avogadro number. Its determination by the various methods. X-ray analysis of crystal structure.
2. Equations of state; nature of van der Waal's forces.
3. Thermochemistry, 1st Law of thermodynamics and its applications, Carnot's cycle and theorem, Clausius-Clapeyron equation and Gibbs-Helmholtz equation.
4. Nernst's theory of solution pressure, concentration cells with and without transport, liquid junction potential, methods of determining and eliminating it.
5. Methods of measuring hydrolysis of salts and ionisation constant of water, distribution of a base between two acids, amphoteric electrolytes.



6. Application of phase rule to two component systems, alloys and intermetallic compounds, adsorption, Langmuir's theory of adsorption, evaporation and heterogeneous catalysis.
7. Colloids and surface chemistry.
8. Radio activity, structure of atom, Periodic table, theories of valency.

*Practical Physical Chemistry.*—1. Molecular weight determination by freezing and boiling point methods and by Victor Meyer's method.

2. Verification of Ostwald's dilution law for weak electrolytes. Determination of dissociation constants of weak electrolytes such as acetic acid, ammonia, etc.

3. Determination of the distribution co-efficient of a substance between two immiscible liquids.

4. Determination of hydrolysis of a salt and the ionization constant of water by electrolytic conductivity method.

5. Determination of the transport number of ions.

6. Preparation of colloidal solutions and determination of the nature of the charge on each.

### M.Sc. and M.Sc. Part II.

The examination will consist of *three* papers and a Practical examination. Each paper shall carry 100 marks and the Practical examination shall carry 200 marks.

Candidates may take any *one* of the following branches:—

- (1) Inorganic, (2) Organic, (3) Physical and  
\*(4) Chemistry and Analysis of Food and  
Drugs, and of Water.

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\*Provided teaching facilities are available.



The branch shall be chosen subject to the approval of the Head of the Chemistry Department.

The candidates are expected to acquaint themselves with the current literature pertaining to the branch selected by them.

The following will be the distribution of papers:

(1) *Inorganic Chemistry.*

Paper I—General, Theoretical and Analytical.

Paper II—Non-metals.

Paper III—Metals.

(2) *Organic.*

*Paper I.—*

1. Alkaloids:—*viz.* atropine, tropeines, cocaine, cinchona alkaloids, morphine alkaloids, ergotoxine, pilocarpine; isolation and degradation products only of—emetine, strychnine, brucine, Production of alkaloids in nature, Robinson's theory.

2. Synthetic drugs:—*viz.* antimalarials, cocaine substitutes, sulfa drugs, amidine, insecticides, penicillin.

3. Terpenes:—*viz.* pinene, camphor, methyl heptenone, geranic acid, citral, geraniol, nerol, linalool, rhodinic acid, rhodinal, rhodinol.

Sesquiterpene, *viz.* zingiberine, preparation, properties, occurrence, etc.

4. Rubber, constitution of caoutchouc, synthetic rubber (*viz.* buna S and N, chloroprene, neoprene, thiokol, butyl rubber).



5. Vitamins, A, B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, C, D, E and H, Pantothenic acid (their occurrence, isolation, synthesis and constitution.)

6. Carcinogenic hydrocarbons.

*Paper II.—*

1. Carbocyclic compounds, aromatic hydrocarbons and their derivatives including polycyclic hydrocarbons.

2. Polymethylenes and their derivatives.

3. Derivatives of  $\alpha$  &  $\gamma$  pyrones and anthocyanines.

4. Vat dyes.

5. Tannins.

6. Sterols, bile acids and hormones.

7. Proteins, nucleic acids.

8. Carbohydrates *viz.* configuration of pentoses and hexoses, constitution of lactose, maltose, cellobiose, gentiobiose, melibiose, sucrose, cellulose and starch.

*Paper III.—*

1. Five and six membered heterocyclic rings with one or more heteroatoms.

2. Stereoisomerism.

3. Chemical constitution and physical properties of organic compounds.

4. Modern electronic concepts of valence as applied to Organic Chemistry.

5. Theories of Organic Chemistry.

6. Chlorophyll and hæmin.

7. Synthetic resins—outline only.

8. Theories of polymerisation.



### *Practical Organic Chemistry:*

#### *A. Analytical.*

1. Quantitative estimation of elements in organic compounds (C, H, N, S, Cl).
2. Quantitative estimation of chief groups in organic compounds (hydroxy, methoxy, nitro, amino and acetyl).
3. Identification of organic compounds.
4. Examination of mixtures of organic substances containing two compounds.
5. Saponification value, iodine value, acid value.

#### *B. Synthetic.*

Preparation of organic compounds involving the use of synthetic methods of organic chemistry.

### *(3) Physical.*

#### *Paper I.—*

1. Gaseous and liquid states.
2. Thermodynamics (including Affinity and Nernst's Heat theorem).
3. Laws of dilute solutions.
4. Law of Mass action.
5. Phase rule and liquid crystals.
6. Electrochemistry.

#### *Paper II.—*

1. Structure of the atom, atomic spectra.
2. Valency, radioactivity, nuclear fission.
3. Molecular constitution and spectra.
4. Crystal structure, electron diffraction.
5. Mechanism and dynamics of chemical reactions.
6. Specific heats of gases and solids.



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## II.—

Surface chemistry including colloids and cata-

. Photochemistry.

★ *Chemistry and Analysis of Food and Drugs, and of Water.*

*Part I:*

(a) Fundamental principles of chemistry as applied to the analysis of Food and Drugs, and of Water.

(b) Application of physicochemical methods to Analytical Chemistry.

(c) Food laws and regulations. Drugs Act and Rules.

*Part II:*

(a) Chemistry of Food and of Water analysis.

★ (b) Chemical bacteriology with special reference to bacteriology of Food and of Water.

(c) Biochemistry with special reference to the biochemistry of Food.

*Part III:*

(a) Chemistry of Drugs and their analysis.

(b) Pharmacognosy and pharmacology.

(c) Physiological chemistry with special reference to the action of Drugs.

*Practical:*

Analysis of Food and Drugs, and of Water, disinfectants, insecticides, fungicides and detection and estimation of adulterants.

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\*Provided teaching facilities are available.



## BOTANY.

## B.Sc. Pass.

(For the Examinations of 1952 and after)

There will be *two* written papers and a Practical examination:—

*Paper I.—*

The systematic morphology and physiology of  
**THALLOPHYTA.**

(a) Bacteria.

(b) Algæ.

Cyanophyceæ: *Oscillaria*, *Anabæna*, *Glæotrichia*.

Chlorophyceæ: *Pleurococcus*, *Chlamydomonas*,  
*Volvox*, *Spirogyra*, *Oedogonium*, *Ulothrix*,  
*Vaucheria*, *Coleochæte*.

Phæophyceæ: *Ectocarpus*, *Sargassum*.

Rhodophyceæ: *Callithamnion*.

(c) Fungi.

Oomycetes: *Albugo*, (*Cystopus*), *Phytophthora*.

Zygomycetes: *Mucor*.

Ascomycetes: *Saccharomyces*, *Aspergillus*, *Asco-*  
*bolus*.

Basidiomycetes: *Ustilago*, *Puccinia*, *Polyporus*,  
*Agaricus*.

(d) Lichenes.



## BRYOPHYTA.

(e) Hepaticæ: *Riccia*, *Marchantia*, *Notothylas*, *Anthoceros*.

(f) Musci: *Funaria*, *Polytrichum*.

## PTERIDOPHYTA.

(g) Filicales: *Pteris*, *Marsilea*.

(h) Lycopodiales: *Lycopodium*, *Selaginella*

(i) Equisetales: *Equisetum*.

## SPERMATOPHYTA.

(j) Gymnosperms: *Cycas*, *Pinus*.

(k) Angiosperms: (*General Morphology and Histology*).

*Paper II.—*

ANGIOSPERMS: Systematic study of the following families with special reference to the local flora:—

Monocotyledons: *Gramineæ*; *Cyperaceæ*; *Palmæ*; *Araceæ*; *Liliaceæ*; *Orchidaceæ*.

Dicotyledons: *Moraceæ*; *Amarantaceæ*; *Caryophyllaceæ*; *Nymphæaceæ*; *Ranunculaceæ*; *Papaveraceæ*; *Cruciferae*; *Rosaceæ*; *Leguminosæ*; *Rutaceæ*; *Meliaceæ*; *Euphorbiaceæ*; *Malvaceæ*; *Myrtaceæ*; *Umbelliferae*; *Apocynaceæ*; *Convolvulaceæ*; *Labiatae*; *Solanaceæ*; *Scrophulariaceæ*; *Acanthaceæ*; *Rubiaceæ*; *Cucurbitaceæ*; *Compositæ*.

*Physiology*: The main facts and principles of Absorption, Transpiration, Assimilation of Nitrogen and



Carbon dioxide, Respiration, Nutrition, Growth and Movements.

*Ecology and Soil Science:* A knowledge of the more important plant communities and their adaptations. Physiological plant anatomy. An elementary knowledge of soil.

*General Botany:* Variation, Heredity and Evolution; Mendelism, plant breeding.

*Applied Botany:* Common diseases of plants of economic value; botany in relation to the more important industries (timber, fibre, rubber, sugar, paper, lac, drugs).

### Practical Examination.

The candidate will be expected—

- (a) to dissect and describe plants in simple technical language and refer them to their proper position in the foregoing scheme of classification;
  - (b) to prepare, stain, and describe microscopic sections;
  - (c) to identify common plants at sight;
- (N. B.—*Permanent mounts are not required*).
- (d) to perform simple micro-chemical tests such as those for starch, cellulose, lignin and suberin;
  - (e) to explain the use of simple physiological apparatus.



### B.Sc. Honours.

*(For the Examinations of 1952 and after)*

*Morphology.*—The structure and affinities of all the important groups of the plant kingdom (living and extinct), with special reference to the Indian flora.

*Physiology and Ecology.*—The general principles of plant physiology and ecology (including physiological anatomy). Geographical Distribution.

*Genetics.*—Variation, Heredity and Evolution; Mendelism; Cytology.

There will be a Practical Test and *four* Theoretical papers as follows:

*Paper I.*—*Algæ, Fungi and Bryophyta.*

*Paper II.*—*Pteridophyta and Gymnosperms.*

*Paper III.*—*Angiosperms and General Biology.*

*Paper IV.*—*Physiology and Ecology, (including Soil Science).*

### M.Sc. Parts I and II.

The examination for the M.Sc. Parts I and II candidates will be identical in each particular year but the two Courses A and B are prescribed alternately from year to year.

*In 1952, the examination for both Previous and Final candidates will cover Course A:—*

#### Course A.

The structure and affinities of all the important groups of the Cryptogams and Gymnosperms (living and extinct) with special reference to the Indian flora.



There will be a Practical Test and *four* Theoretical Papers as follows:—

*Paper I.* { Section A. Virus and Bacteria.  
                  { Section B. Algæ.

*Paper II.* { Fungi and Lichens.

*Paper III.* { Section A. Bryophyta.  
                  { Section B. Pteridophyta.

*Paper IV.* { Section A. Gymnosperms.  
                  { Section B. Palæobotany.

Or

### Course B.

*Angiosperms.*—The systematic morphology, affinities and geographical distribution of the flora.

*General Biology.*—Variation, Heredity and Evolution; Mendelism; Cytology, and general principles of Plant Breeding.

*Physiology.*—Detailed study of the principles of Plant Physiology.

*Ecology and Plant Geography.*—Principal features of Autecology and general principles of Plant Distribution.

*Soil Science.*—An elementary knowledge of Soil Science with special reference to the agricultural crops.

*Plant Pathology.*—Detailed study of the various plant diseases and specially those occurring in India.



There will be a Practical Test and *four* Theoretical Papers as follows:—

- Paper I.* { Section A. Morphology of Angiosperms.  
                  { Section B. Taxonomy of Angiosperms.
- Paper II.* { Section A. Plant Geography, Ecology and  
                  {                   Soil Science.  
                  { Section B. Genetics, Cytology and Plant  
                  {                   Breeding.
- Paper III.* { Plant Pathology.
- Paper IV.* { Plant Physiology.

### M.Sc.

*(For the Examinations of 1952 and after)*

*(For Graduates with Honours in Botany).*

A candidate shall be required to offer for his examination a special subject, and to show a general acquaintance with the current literature in the whole of Botany. The special subject shall be chosen subject to the approval of the Head of the Botany Department.

Special subject:—

- (1) Algæ.
- (2) Fungi.
- (3) Bryophyta.
- (4) Pteridophyta.
- (5) Gymnosperms.



- 
- (6) Angiosperms.
  - (7) Ecology (including physiological anatomy).
  - (8) Soil Science.
  - (9) Metabolic aspects of Plant Physiology.
  - (10) Irritability of Plants.
  - (11) General Biology (variations, heredity, evolution, cytology and genetics).
  - (12) Palæobotany.

There will be a Practical Test and *three* Theoretical Papers as follows:—

*Paper I.—Essay.*

*Paper II.—Special Subject.*

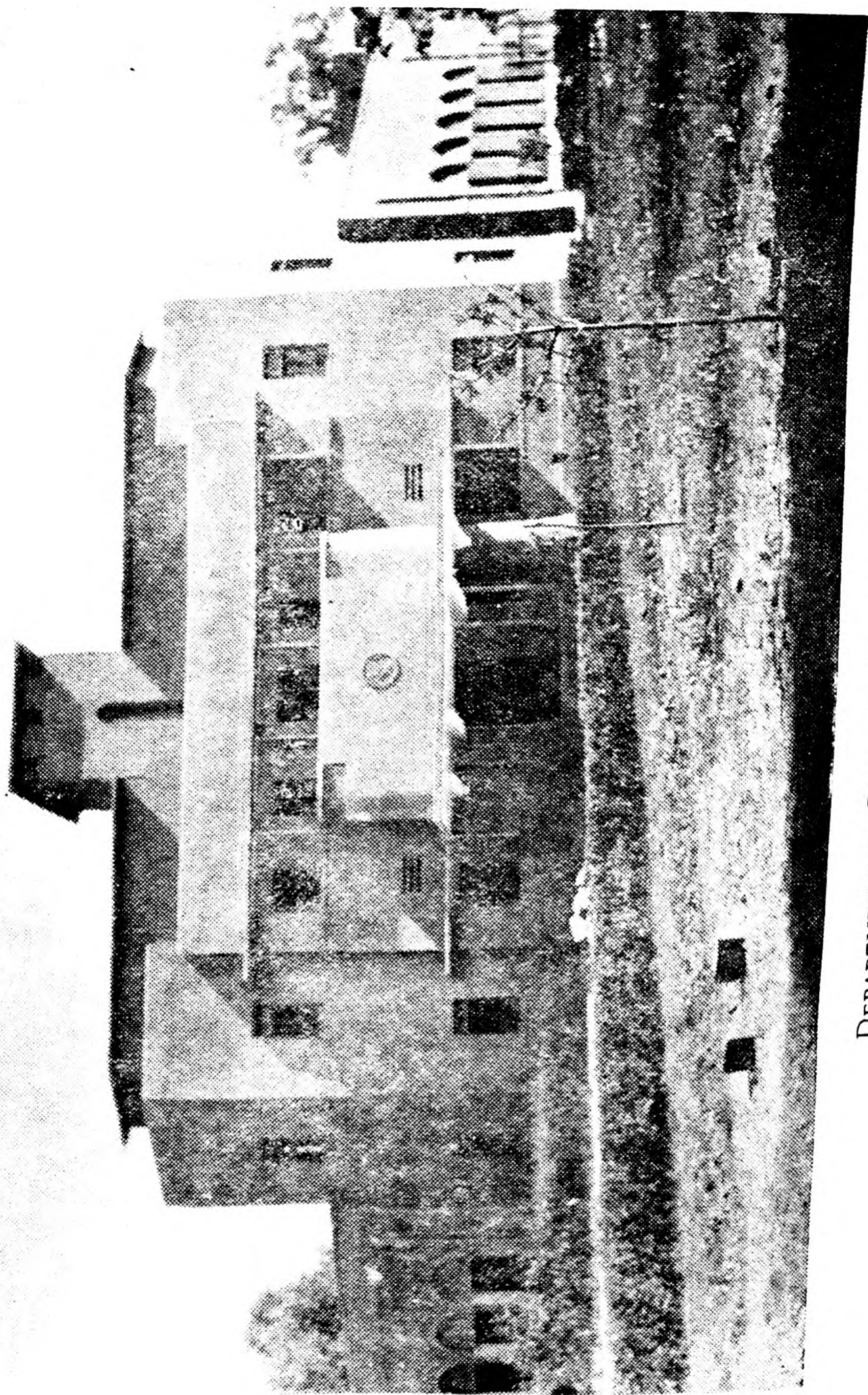
*Paper III.—Special Subject.*

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DEPARTMENT OF GEOLOGY, LUCKNOW UNIVERSITY



## GEOLOGY.

B.Sc. Pass.

*Scheme of Examination.*

The Final examination will consist of two parts:—

*(a) Written Examination:*

	Marks.
<i>Paper I:</i> (Dynamical and Structural Geology. Stratigraphy and Palæontology)	40
<i>Paper II:</i> (Crystallography, Mineralogy, Petrology and Economic Geology ....	40

*(b) Practical and Class Tests:*

(i) Practical Tests	....	40	
(ii) Class Tests and Field Work	30		(Theory 20 and Prac- tical 10)
Total , ....	150		

## General.

The scope of Geology; elementary ideas concerning the origin and structure of the Earth, the development of its surface features; the concept of geological time, the sub-divisions of the stratigraphical record; the fossil record and its bearing on organic evolution; the structure of minerals and rocks composing the Earth's crust; economic applications. Geology of India.

*Paper I.—**(a) Dynamical and Structural Geology:—*

The structure and age of the Earth. The different geological agencies and their effects upon topography. Volcanoes; earthquakes; mountains; diastrophism; isostasy; the origin of continents and oceans.



The structure of sedimentary, igneous and metamorphic rocks. Dip and strike, thickness and outcrop of beds. Joints and cleavage. Folds, Faults and their effects on outcrops. Unconformity and overlap; thrust. Geological maps and sections. Contour maps and the effect of topography on outcrops.

*(b) Stratigraphy and Palæontology:—*

The principles of stratigraphy. Lithological and chronological sub-divisions of the geological record. The outstanding features of the Geology of India.

Fossils, their nature and mode of preservation. The bearing of palæontological data upon evolution, geological age, distribution of land and water, and climate. An elementary knowledge of the morphology and distribution of Protozoa, Actinozoa, Graptolitoidea, Crinoidea, Echinoidea, Brachiopoda, Lamellibranchiata, Gastropoda, Cephalopoda, Trilobita, Vertebrata; Algæ, Pteridophyta, Pteridospermæ, Coniferales, Cycædophyta, Cordiales, Angiospermæ.

*Paper II.—*

*(a) Crystallography and Mineralogy:—*

An elementary knowledge of the following:—

Crystal forms; the laws of Crystallography. External symmetry of crystals. Crystal systems and classes; crystal habits; twinning.

Physical and chemical properties of minerals. The petrological microscope. Optical characters of minerals.

Study of the more important rock-forming and economic minerals with regard to their chemical composition, physical properties. Crystallographic and microscopic characters, alterations, occurrence and commercial uses.



(b) *Petrology*:—

Igneous, sedimentary and metamorphic rocks, their morphology, texture, mode of occurrence, origin and classification. Elementary ideas about magnetic differentiation, assimilation and metamorphism. Study of common rock types.

(c) *Economic Geology*:—

(Geology as applied to mining, engineering, agriculture and forestry.)

Mode of occurrence, origin, and classification of ore deposits. Secondary enrichment. The chief metallic and non-metallic minerals of economic importance.

Coal, petroleum and other minerals of economic importance.

The relation of minerals to specific industries. Economic geology of India with special reference to the United Provinces and Bihar.

*Laboratory Work*:—

Reading and drawing of typical crystals, determination of density and hardness of minerals, blow-pipe tests; examination of the more important mineral and rocks in hand specimens and under the microscope. Study of the morphology of representative fossil types. Reading of geological models and maps; easy exercises on the outcrop of beds; drawing sections across simple geological structures.

*Field Work*.—

Every student will be expected to attend the field excursions held during each year and submit periodically to the Head of the Department a record of his field observations and any specimens collected by him properly labelled and arranged. The marks assigned to the field work by the examiners will be on the basis of these records and collections.



### B.Sc. Honours.

A more detailed study of the course prescribed for the B.Sc. (Pass) examination will be required.

#### *Scheme of the Examination.*

##### (a) Written Examination:—

	Marks.
<i>Paper I:</i> General and Structural Geology	100
<i>Paper II:</i> Crystallography, Mineralogy and Petrology	100
<i>Paper III:</i> Palæontology and Stratigraphy	100
<i>Paper IV:</i> Economic Geology	100

##### (b) Practical Examination:—

(i) Laboratory work (including record of class work)	160
(ii) Field work	40
Total	200

Every student will be expected to attend the field excursions held during each year and submit periodically to the Head of the Department a record of his observations and any specimens collected by him, properly labelled and arranged. The marks assigned to the field work by the examiners will be on the basis of these records and collections.



## M.Sc. Part I

*(For the Examinations of 1952 and after)**Scheme of Examination.**(a) Written Examination:—*

	Marks.
<i>Paper I: Crystallography and Mineralogy</i>	100
<i>Paper II: Petrology</i> ....	100
<i>Paper III: Economic Geology</i> ....	100

*(b) Practical Examination:—*

<i>(i) Laboratory work (including record of class work)</i> ....	160
<i>(ii) (Field work)</i> ....	40
Total	500

*Paper I:—Crystallography and Mineralogy:—*In addition to a more detailed knowledge of Crystallography than is prescribed for the B.Sc. (Pass) a detailed study of the rock-forming minerals, their physical, chemical and optical characters, their occurrence, origin, association and alteration products.

*Paper II.—Petrology.—*Classification of igneous rocks. Petrographic methods and calculation. Origin and evolution of rocks-types. Structures and textures of rocks. Mechanics of intrusion and extrusion. Petrographic provinces. Classification and characters of sedimentary rocks. Sedimentary petrography. Nature, origin, character and classification of metamorphic rocks. Study of important Indian rock-types. Nature, origin, character s and classification of meteorites.



*Paper III:—Economic Geology:* Chemical and physical properties of minerals of economic importance. The occurrence and commercial uses of the metallic and non-metallic minerals of economic importance. Orogenesis. Secondary enrichment. Ore deposits of India and the more important ore deposits of the world. Mineral statistics, marketing and royalty. Study of strategic minerals.

**Coal:—**Its origin, distribution, classification and commercial uses. The coal-fields of India. Reserves and conservation of coal in India.

**Petroleum:—**Its origin and mode of occurrence. The oil-fields of India and Burma. The principal oil-fields of the World. Natural gas and oil shales.

Non-metallic minerals of industrial importance, their deposits in India. Rare minerals. Building and ornamental stones. Road materials. Precious and semi-precious stones. Soils and subsoils. Soil chemistry.

**Engineering Geology:** Problems of water supply. Methods of prospecting including geophysical prospecting. Common methods of mining. Dressing of ores and their metallurgical treatment.

*Laboratory work:—*The measurement of simple crystals by means of the reflecting goniometer and the calculation of the crystallographic elements, Stereographic projections. The optical study of uniaxial and biaxial minerals.

A practical study of rock-forming minerals and a megascopic and microscopic study of rocks. Chemical analysis of rocks and minerals in the laboratory.

Identification in hand specimens and by blow-pipe tests of the metallic and non-metallic minerals of economic importance.



*Field Work*:—Every student will be expected to attend the field excursions held during the year and submit periodically to the Head of the Department a record of his field observations and any specimens collected by him, properly labelled and arranged. The marks assigned to the field work by the examiners will be on the basis of these records and collections.

## M.Sc. Part II.

### *Scheme of Examination.*

*(For the Examinations of 1952 and after)*

#### *(a) Written Examination:—*

			Marks.
<i>Paper I:</i>	General and Structural Geology	....	100
<i>Paper II:</i>	Palæontology	....	100
<i>Paper III:</i>	Stratigraphy	....	100

#### *(b) Practical Examinations:—*

<i>(i)</i>	Laboratory work including record of class work)	....	160
<i>(ii)</i>	Field work	....	40
	Total	....	500

*Paper I: General Geology*:—History and development of the science of Geology and its different branches.

Shape, size and density of the Earth. Theories of its origin. Age of the Earth. Constitution and probable condition of the Earth's interior. Radio-activity and its application to problems of Geology. Igneous



action and its manifestation. Seismology—principles, instruments, records, Earthquake and Volcanic belts. Origin of the Alps and the Himalayas and their tectonics. Isostasy. Diastrophism. Origin of continents and ocean basins.

*Paper II: Palæontology:*—Organic matter. Origin of life. Classification of organisms. Theory of organic evolution and the bearing of palæontological data on it. Collection and preparation of fossils for study. Rules of nomenclature. Importance of fossils as indices of geological age and in the correlation of strata. Geographical distribution, migration and dispersal of faunas and floras, their relation to past climates and to the past distribution of land and sea. Distribution of existing faunas and floras and their relation to those of former geological periods.

Detailed study and geological history of the principal groups of invertebrate, vertebrate and plant fossils with special reference to Indian forms.

*Paper III: Stratigraphy:*—Principles of stratigraphy. Sub-divisions of the geological record. Different methods of correlation. Homotaxis. Climatic variations. The distribution of animals and plants. A detailed study of the geological formations, their lithology, igneous activity, tectonics, fossils, economics and correlation.

A study of different periods with respect to the distribution of land and sea and of the faunas and floras. The stratigraphy of important type areas for different geological systems. Comprehensive study of the rock formations of India, Burma and Ceylon and their correlation with the standard stratigraphical scale.



*Laboratory Work:* Study of geological maps with special reference to structures and drawing of geological sections.

Description, drawing and identification of important plant, invertebrate and vertebrate fossils.

Geological mapping of a selected area in the field.

Surveying a plot of land with a chain, prismatic compass and theodolite.. Filling in of details with a plane table. Use of the level, Reduction of results and plotting.

*Field Work:* Every student will be expected to attend the field excursions held during the year and submit periodically to the Head of the Department a record of his field observations and any specimens collected by him, properly labelled and arranged. The marks assigned to the field work by the examiners will be on the basis of these records and collections.

### M.Sc.

*(For Graduates with Honours in Geology)*

#### *Scheme of Examination.*

*(For the Exminations of 1952 and after)*

*(a) Written Examination:—*

*Paper I: Recent Advances in Indian  
Geology\**

Marks.

.... 100

\*Essay paper in which the candidate will attempt three out of at least six questions.



## Marks.

*Paper II:* Special subject. One from Group A (Palæontology) subject to the approval of the Head of the Department .... 100

*Paper :III* Special subject. One from Group B (Mineralogy, Petrology and Economic Geology) subject to the approval of the Head of the Department.

*(b) Practical Examination:—*

(i) Laboratory work (including record of class work)	....	....	160
(ii) Field work	....	....	40
	Total	....	<hr/> 500

*Special Subject:—*

*Group A.*—Palæontology.

1. Invertebrate Palæontology.
2. Vertebrate Palæontology.
3. Micro-Palæontology.
4. Palæonbotany.

*Group B.*—Mineralogy, Petrology and Economic Geology.

1. Mineralogy.
2. Sedimentary Petrography.
3. Archyæan Geology of India.
4. Geology of Coal and Oil.



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*COURSES OF STUDY.**M.Sc.*

*(For Graduates with Honours in Geology)*

*(For the Examinations of 1952 and after)*

*Paper I.—Recent Advances in Indian Geology.*

Candidates shall be required to show a general acquaintance with current literature dealing with all aspects of Indian Geology.

*Paper II.—Special subject Palæontology.*

1. Invertebrate Palæontology:—with emphasis on taxonomic, evolutionary, stratigraphic palæontology and palæoecology. A detailed knowledge of the more important Indian fossils of the following groups: Corals, Brachiopods, Polyzoans, Echinoderms, Molluses and Trilobites. Candidates should be conversant with palæontological methods used in the field, laboratory and museum. Preparation and use of keys for generic and specific identifications. Statistical methods and the use of graphs in Palæontology.

3. *Micro Palæontology.*—Objects and uses. A general account of the following groups: Foraminifera, Radiolaria, Ostracoda, Diatomaceæ and Calcareous algæ. Knowledge of the more important foraminifera described from India; geographic and stratigraphic distribution of foraminifera. Preparing and mounting of material for study. Identification of genera with the help of keys. Micro-palæontologic analysis. Palæoecology. Candidates should have actual experience of collecting microfossils in the field.



4. *Palæobotany*.—A detailed study (converging impressions, compressions, petrifications and microfossils) of the various Indian fossils flora. The candidates are expected to be familiar with the Indian Palæobotanical literature, various plant bearing beds and the different plant fossils, their morphology, anatomy and their bearing on problems on Indian stratigraphy.

*Paper III.—Special subjects.*—Mineralogy, Petrology and Economic Geology.

I. *Mineralogy*.—An advanced course in Physics and chemical mineralogy including the use of Federov Stage.

2. *Sedimentary Petrography*.—Principles and methods of heavy mineral separation and study. Graphical representation of frequencies of heavy minerals. Principles of correlation. Application in the economic field.

3. *Problems in Archæan Geology of India*.—Distribution, principles of correlation, petrology, metamorphism and mineral resources. Candidates should be acquainted with current literature dealing with these topics.

4. *Geology of Coal and Oil*:—*Coal*—Origin, classification distribution and geologic occurrence in India. Coal petrography. Problems of reserves and conservation. *Oil*—Origin, distribution and geologic occurrence in India. Geophysical prospecting for oil in India. Resources and future possibilities.



## ZOOLOGY.

## B. Sc. Pass.

(For the Examinations of 1952 and after)

There will be *two* written papers and a Practical examination:

*Paper I.*—The structure and phenomena of the animal cell. Reproduction, sexual and asexual, and parthenogenesis. Alternation of generations and metamorphosis.

The structure, habits and development of the following groups of animals including a detailed study of the types given in each:—

Protozoa	.... <i>Amæba</i> , <i>Euglena</i> , <i>Monocystis</i> , <i>Plasmodium</i> , <i>Paramæcium</i> and <i>Vorticella</i> .
Porifera	.... <i>Sycon</i> .
Cœlenterata	.... <i>Hydra</i> , <i>Obelia</i> and <i>Aurelia</i> .
Platyhelminthes	.... <i>Fasciola</i> , (Liver-fluke) and Tape- worm.
Nemathelminthes	.... <i>Ascaris</i> .
Annelida	.... <i>Nereis</i> , <i>Pheretima</i> (earthworm) and <i>Hirudinaria</i> (leech).
Echinodermata	.... Starfish (excluding development).
Arthropoda	.... <i>Palæmon</i> (prawn), <i>Daphnia</i> and <i>Cyclops</i> (general characters only). Cockroach, <i>Anopheles</i> , <i>Musca</i> (housefly) and <i>Palamnæus</i> (scorpion).
Mollusca	.... <i>Lamellidens</i> (fresh-water mussei), and <i>Pila</i> (applesnail.)



## Practical Syllabus.

### PROTOZOA

#### (a) Types—

##### *Amoeba*—

Culture examination—Various species of *Amæba*.

Prepared slides—*Amæba proteus*.

##### *Euglena*—

Live specimens.

Treat with osmic or acetic acid and stain for nucleus.

##### *Monocystis*—

From seminal vesicles of *Pheretima* or *Eutyphæus*.

Examine different stages in the life-history.

Make permanent mounts.

Prepared slides.

##### *Plasmodium*—

Preparation of blood-film of man.

Prepared slides showing the parasites.

##### *Paramœcium*—

Culture examination. Live specimens.

Addition of mucilage to restrain active movements.

Treat with osmic or acetic acid and stain for nucleus.

Feeding experiment with Congo red and yeast.

Binary division.

Conjugating specimen.

##### *Variticella*—

Live specimens.

Conjugation.

Treat with osmic or acetic acid and stain for nucleus.



**(b) General—**

Examination of pond-water for different kinds of micro-organisms.

*Pelomyxa*, *Areolla*, *Polystomella*, *Globigerina*, *Actinophrys*, *Thalassicolla*, *Ceratium*, *Noctiluca*, *Volvox*, *Trypanosoma*, *Gregarina*.

Ciliates from the rectum of frog—*Opalina*, *Balantidium* and *Nyctotherus*.

**PORIFERA****(a) Type—**

*Sycon*—

General characters.

Spicules.

Transverse and longitudinal sections.

**(b) General—**

*Spongilla* (the fresh-water sponge).

Gemmules.

*Cliona* (Boring sponge)

*Euspongia* (Bath-sponge). Spongin fibres.

*Leucosolenia*.

*Euplectella* (Venus's flower-basket)

Different kinds of spicules.

**COELENTERATA****(a) Types—**

*Hydra*—

Live specimens.

Whole mounts—tentacles, buds, mature specimens.

Longitudinal and transverse sections.

*Obelia*—

Colony—Stained balsam mounts.

Medusa—Stained balsam mounts.



*Aurelia*—

General morphology.

Mounting of tentaculocyst.

Prepared slides and models for the study of the life-history.

(b) General—

*Rhizostoma*.

*Physalia* (Portuguese man-of-war).

*Corallium* (red coral).

*Fungia* (mushroom coral).

*Astræa*, *Madrepora* (stag-horn coral).

*Meandrina* (brain coral).

*Tubipora* (organ pipe coral).

*Pennatula* (seapen).

*Gorgonia* (sea-fan).

*Sagartia* or *Metridium* (sea-anemone).

## PLATYHELMINTHES

(a) Types—

*Fasciola*—

Mounted specimens.

Transverse sections.

Larval form—Prepared slides.

*Taenia*—

Prepared slides of scolex and proglottides.

Transverse section of a proglottid. Larval forms.

Mounting of head and proglottides (mature and gravid segments) of *Cotugnia* or *Raillietina* (tapeworm of pigeon.)



**(b) General—**

Planarian.

*Diplozoon*, *Polystomum*, *Paramphistomum*, *Schistosoma*.  
*Taenia solium*, *Taenia saginata*, *Echinococcus*, *Dipylidium*,  
*Cysticercus* and *Cysticercoid*.

**NEMATHELMINTHES.****(a) Type—**

*Ascaris*—

External characters.

Dissected specimen.

Transverse sections of male and female.

**(b) General—**

*Ascaris megalocephala* (from horse).

*Ascaris lumbricoides* (from man).

*Enterobius vermicularis* (from man).

*Ancylostoma duodenalis* (from man).

**ANNELIDA****(a) Types—**

*Nereis*—

External characters.

Dissection.

Parapodium mount.

Transverse section.

Parapodium of *Heteronereis*.

*Pheretima*—

External characters.

Dissection.

Mounting of setæ, brain, skin ovary, and nephridia.

Prepared slides of transverse sections through various  
regions—gizzard, pharynx, typhlosole, seminal  
vesicles, prostate glands.



**Hirudinaria—**

External characters.

Dissection.

Mounting of jaws and nephridium.

Transverse Section. Prepared slides.

**(b) General—**

*Heteronereis*, *Arenicola*, *Aphrodite*, *Chaetopterus*.

*Eutyphoeus*, *Lumbricus*, *Allolobophora*.

Aquatic Oligochætes: *Dero*.

*Pontobdella*, *Clepsine* (*Glossiphonia*), *Branchellion*.

*Sipunculus*, *Bonellia*.

**ECHINODERMATA.****(a) Type—*****Pentaceros*—**

External characters.

Dissection.

Mounting of ampullæ and pedicellariæ.

Transverse section of arm.

**(b) General—**

*Echinus* (sea-urchin).

*Ophiothrix* (brittle-star).

*Antedon* (feather-star).

*Holothuria* (sea-cucumber).

**ARTHROPODA.****(a) Types—*****Palaemon*—**

External characters. Examination of appendages.

Dissection.

Mounting of statocyst.

Section of eye.



*Daphnia and Cyclops*—

Live specimens. Heart beat in *Daphnia*.

*Periplaneta*—

External characters.

Dissection.

Circulation of blood in the wing of Cockroach.

Mounting of mouth-appendages, salivary glands, tracheæ, malpighian tubules, ovary and testis.

*Anopheles*—

Differences between *Anopheles* and *Culex*.

Wings.

Mouth-parts of male and female.

Life-history.

*Musca*—

External characters.

Mounting of proboscis.

Life-history.

*Palamnæus* (Scorpion.)

External characters.

Dissection.

## (b) General—

*Lepas*, *Balanus*. *Pagurus* (hermit crab), *Neptunus* or *Scylla* (crab); *Squilla*; *Oniscus* (land crustacean); *Sacculina* on crab.

Larval forms: *Nauplius*. *Zoæa* and *Magalopa*.

*Lepisma* (silver fish). *Pæcilocerus* (grasshopper).

*Schistocerca gregaria* (locust.)

*Odontotermes* (white ant).

*Palæophlebia* (dragon fly.)

*Cimex rotundatus* (bed bug): *Dysdercus* (bug).



*Pediculus* (louse), *Papilio* (butterfly).  
*Scirpophaga* (moth) *Heliocopris* (dung beetle).  
*Chilomens sexmaculatus* (lady-bird beetle).  
*Tribolium* (red grain beetle).  
*Apis indica* (honey bee). *Polistes* (wasp).  
*Vespa* (wasp). *Camponotus* (black ant).  
*Musca nebulosa* (house-fly). *Stomoxys* (stable-fly).  
*Xenopsylla cheopis* (rat flea).  
*Thyropygus* (millipede) *Scolopendra* (centipede).  
*Cteniza* or *Lycosa* (spider). *Myrmarachne* (ant-like spider). *Ixodes* (tick), *Limulus* (king crab).

## MOLLUSCA

### (a) Types—

#### *Lamellidens* —

External characters.  
 Dissection.  
 Mounting of gill.  
 Transverse section.  
 Glochidium larva.

#### *Pila*—

External characters.  
 Dissection.

### (b) General

*Chiton*, *Pecten*, *Solen*, *Teredo navalis*, *Turbinella pyrum* (sankha).

Slug, *Doris*, *Carinaria*, *Aplysia*, *Dentalium*. *Sepia*, *Octopus*, *Nautilus*.

### Paper II.—

Urochordata .... *Herdmania* (The monascidian of the Indian seas).

Cephalochordata .... *Branchiostom* (*Amphioxus*).



**Craniata :**

- (i) Cyclostomata .... *Petromyzon* (external characters only).
- (ii) Pisces .... *Scoliodon* (the shark of the Indian seas).
- (iii) Amphibia .... *Rana*.
- (iv) Reptila .... *Uromastix* (skeleton of *Varanus* to be substituted).
- (v) Aves .... *Columba* (skeleton of *Gallus* to be substituted).
- (vi) Mammalia .... Squirrel or Rabbit (heart, eye and brain of sheep to be substituted). Skull of Dog. General characters of the various orders of the class Mammalia.

Evolution, Heredity and Variation.

Elementary principles of geological and geographical distribution of animals.

General principles of classification.

Outlines of the development of *Branchiostoma* (*Amphioxus*), frog, chick and rabbit.

The general classification and characteristics of the common forms of animal tissues.

**Practical Syllabus.****CEPHALOCHORDATA.**

(a) Type:—*Branchiostoma* (*Amphioxus*).

- I. External characters.
- II. Dissection of alimentary canal with liver-diverticulum; notochord; nerve-cord and gonads.



- III. (a) Mounting of oral hood.  
(b) Mounting of velum with tentacles.  
(c) Mounting of the wall of pharynx.  
(d) Sections through the various regions of the body.  
(e) Models illustrating development.

## UROCHORDATA

(a) **Type:**—*Herdmania* (*Rhabdocynthia*).

I. External characters:—

(a) Siphons. (b) Orientation. (c) Spicules in the test.

II. Dissection.

III. Mounting of branchial wall, tentacles, neural gland, nerveganglion and dorsal tubercle.

IV. Larva and metamorphosis.

(b) **Classification and General Organisation:**—

(a) Ascidiacea: e. g. *Herdmania*, *Ascidta*, *Ciona*, *Clavellina*, *Molgula*.

(b) Thalliacea: e. g. *Pyrosoma*, *Doliolum* and *Salpa*

(c) Larvacea: e. g. *Oikopleura*.

## PISCES.

(a) **Type**—*Scoliodon* (The shark).

I. External characters.

II. Exoskeleton:—Preparation of placoid scales.

III. Myotomes.

IV. Endoskeleton:

1. Axial skeleton:

A. Vertebral column.

B. Skull.

C. Jaws and branchial arches.



## 2. Appendicular skeleton:

- A. Pectoral girdle and fins.
- B. Pelvic girdle and fins.

## V. Dissection:—

(a) Digestive system. Examine the “scroll valve” by cutting open the intestine.

(b) Vascular system:—

Heart, ventral aorta, arterial arches (afferent and efferent).

Dorsal aorta, Cuvierian sinuses, Anterior and posterior cardinals.

(c) Gills.

(d) Urinogenital system.

(e) Nervous system—Brain & Cranial nerves.

(f) Internal ear.

(g) Eye-muscles.

VI. (a) Study sections through various regions of the body.

(b) Development of placoid scales.

(c) *Scoliodon* embryo with yolk-sac placenta.

(b) *Labeo rohita* (Rohu)—General Morphology.

(c) Classification and General Organisation:—

## CYCLOSTOMATA.

*Petromyzon* (lamprey), External characters.

Ammocoete larva.

*Myxine* (hag), External characters.

## GNATHOSTOMATA.

(a) Chondrichthyes:—

*Heptranchias*, *Scyliorhinus*, *Zygæna* (hammerheaded shark). *Pristis* (sawfish), *Torpedo* (electric ray), *Raia* (ray), *Chimaera monstrosa*.



## (b) (i) Osteichthyes:—

*Acipenser* (sturgeon), *Lepidosteus*, *Amia*, *Hippocampus* (sea-horse), *Lophius*, *Piscatorius*, *Anguilla* (eel), *Pleuronectes* (sole), *Ceratodus* (lung-fish), *Exocoetus* (flying fish), *Clarias batrachus* (magur) and *Anabas* (climbing perch).

## (c) (i) Different kinds of scales.

## (ii) Different kinds of tail fins.

## AMPHIBIA.

(a) Type—*Rana tigrina* (frog).

## I. (a) Separation of investing bones.

## (b) Decalcification of bone.

## (c) Incineration of bone.

## II. General dissection.

## III. Cranial nerves and brain.

## IV. Development (from actual specimens and models).

## (b) Classification and General Organisation:—

(a) Urodela:—*Salamandra*, *Proteus*, *Siren*, *Amphiuma*, *Amblystoma* and *Axolotl*.

## (b) Anura:—

*Pipa*, *Bufo*, *Hyla* (tree frog), *Alytes obstetricans* (midwife-toad), *Bombina igneus* (fire-bellied toad).

(c) Gymnophiona—*Siphonops*.

## (c) Physiological experiments.

Pithing of frog; wiping reflex; knee-jerk reflex; contractility (nerve-muscle-preparation); action of the various digestive juices on food; circulation of blood in frog's web or tail of tadpole; respiration.



## REPTILIA.

(a) Type—*Uromastix hardwickii*.

- I. External characters.
- II. Skeleton of *Varanus* to be substituted.
  1. Axial skeleton:—
    - (a) Vertebral column.
    - (b) Ribs and sternum.
    - (c) Skull.
  2. Appendicular skeleton:—
    - (a) Pectoral girdle and fore-limb.
    - (b) Pelvic girdle and hind-limb.
- III. Dissection.
  - (a) Digestive system.
  - (b) Vascular system.
  - (c) Respiratory system.
  - (d) Urinogenital system.
  - (e) Nervous system—Brain.

## (b) Classification and General Organisation:—

- (a) Lacertilia—*Varanus*, *Heloderma* (poisonous lizard), *Hemidactylus* (wall-lizard), *Chamaeleon*, *Draco volans* (flying-lizard). *Anguis*.
- (b) Ophidia:—Differences between poisonous and non-poisonous snakes. *Naja* (cobra), *Crotalus* (rattle-snake), *Vipera* (viper), *Zamenis* (rat-snake), *Typhlops* (burrowing snake) and *Python*. Biting mechanism of a poisonous snake (model).
- (c) Chelonia:—Epidermal and dermal armature.
- (d) Crocodilia; Differences between alligator, crocodile and gavial.
- (e) Extinct reptiles—models.



## AVES.

(a) Type—*Columba livia intermedia* (pigeon).

I. External characters:—Structure of feather. Varieties of feathers.

II. Skeleton of fowl to be substituted.

1. Axial skeleton.

(a) Vertebral column.

(b) Ribs and sternum.

(c) Skull.

2. Appendicular skeleton.

(a) Pectoral girdle and fore-limb.

(b) Pelvic girdle and hind limb.

III. Dissection:—

Flight muscles. Air sacs. Digestive system.

Respiratory system. Vascular system.

Urinogenital system, Nervous system—Brain.

(b) Classification and General Organisation:—

I. Archæornithes—*Archæopteryx* (cast).

II. Neornithes—

(a) Ratiæ—*Struthio* and *Rhea*.

(b) Carinatae—

*Gallus domesticus* (fowl). *Anser* (duck)

*Corvus* (crow). *Psittacula* (parrot).

Perching mechanism (model).

Feet of Birds (models). Beaks of birds.

III. Embryology of chick (in outline.)

## MAMMALIA.

(a) Type—*Funambulus palmarum* (squirrel).

I. External characters, Structure and development of hair.



II. Skeleton of Rabbit to be substituted.

1. Axial skeleton.

- (a) Vertebral column.
- (b) Ribs and sternum.
- (c) Skull.

2. Appendicular skeleton.

- (a) Pectoral girdle and fore-limb.
- (b) Pelvic girdle and hind limb.

III. Skull of *Canis familiaris* (dog).

IV. Dissection:—

Digestive system. Respiratory system. Vascular system, Urinogenital system. Nervous system.

V. Dissection of heart, eye, and brain of sheep.

VI. Models of heart, eye, ear, brain and trachea.

(b) Classification and General Organisation:—

- I. Prototheria—*Echidna*, *Ornithorhynchus*.
- II. Metatheria—*Macropus* (kangaroo).
- III. Eutheria.

(a) Xenarthra.—*Bradypus* (sloth), *Armadillo*.

(b) Pholidota—*Manis* (scaly ant-eater).

(c) Cetacea—*Platanista* (dolphin).

(d) Ungulata—*Equus caballus* (horse).

*Equus vulgaris* (ass). *Equus zebra* (zebra).

*R. unicornis* (Rhinoceros). *Camelus*

*dromedarius* (Arabian camel), *Giraffa*

*camelopardalis* (giraffe). *Bos* (ox) *Ovis*

(sheep). *Capra* (goat). *Kervus* (deer).

*Sus* (pig). *Elephas indicus* (elephant).

(e) Carnivora—

*Felis domesticus* (cat). *Felis leo* (lion).

*Felis tigris* (tiger). *Canis familiaris* (dog)

*Ursus* (bear). *Hyaena* (hyaena). *Phoca*

(seal).



## (f) Rodentia—

*Mus* (rats) and (mice). *Lepus* (hare and rabbit).

*Hystrix* (porcupine).

## (g) Insectivora—

*Erinaceus* (hedgehog). *Sorex* (shrew). *Talpa* (mole).

## (h) Chiroptera—

*Pteropus* (flying-fox). *Vespertilio* (small bat)

## (i) Primates.—

*Macacus*. *Myctes* (howling monkey).

*Hylobates* (gibbon). *Simia* (orange).

*Anthropopithecus* (chimpanzee).

*Gorilla*. *Homo* (man).

#### IV. Modifications of limbs in various mammals with examples.

### HISTOLOGY.

#### I. Study of the Living Cell.

(a) *Amæba* and other organisms from cultures.

(b) Circulation of protoplasm.

#### II. Cell-Division.

Sections of the root-tip of onion: various stages.

#### III. Tissues.

##### (a) Epithelial.

(i) Squamous. (ii) Columnar. (iii) Ciliated.

(iv) Glandular.

(v) Stratified.



(b) Muscular.

- (i) *Striped muscles.*
- (ii) *Unstriped muscles.*
- (iii) *Cardiac muscles.*

(c) Connective.

- (i) *Areolar tissue.*
- (ii) *Tendon of the leg-muscle of a frog. Tease and examine in glycerine.*
- (iii) *Adipose tissue from an insect and a frog.*
- (iv) *Cartilage.*

Free hand section of frog's hyoid, supra-scapula.  
Stains with hæmatoxylin.

(v) *Bone.*

Decalcification of a bone.

Prepared sides:—

T. S. of a bone by grinding method.

T. S. of a bone by decalcification.

(b) Blood.

Staining of blood film.

Frog's blood and human blood.

(e) Nervous.

Spinal cord, T. S.

Medullated and non-medullated nerve-fibres.

VI. Histology of various organs. Prepared slides.



Candidates will be required to show a knowledge of the methods of microscopic technique and to examine, describe or dissect the types prescribed. Candidates will also be required to submit their note-books, containing a complete record of the laboratory work, initialled and dated by the teacher for the determination of the results of the examination.

### B.Sc. Honours.

*(For the Examinations of 1952 and after)*

1. The structure, habits, development and classification of the following groups:—

Protozoa, Porifera, Coelenterata, Platyhelminthes, Nemertinea, Nemathelminthes, Annelida, Rotifera, Polyzoa, Molluscoidea, Echinodermata, Arthropoda, Mollusca, Hemichordata, Urochordata, Cephalochordata and Craniata.

2. A knowledge of the mode of occurrence and distribution in time and space of representatives and aberrant members of the various groups of the animal kingdom.

3. The cell and its leading structural modifications and functional relationship of its constituent parts.

4. Evidences bearing upon the hypothesis of evolution, general theories of variation, heredity, adaptation, sex and origin of species.

5. A detailed practical study of the embryology of frog and chick.

The above schedule will also form the basis of the Practical examination.



Candidates will be required to submit their practical note-books initialled and dated by their teachers and preparations of their laboratory work. These will be taken into account in determining the results of the examination.

There will be a Practical Test and *four* papers as follows:—

*Paper I.*—Essay.

*Paper II.*—Invertebrata.

*Paper III.*—Chordata.

*Paper IV.*—General Biology.

### M.Sc. Parts I and II.

*(For the Examinations of 1952 and after)*

The examination for the M.Sc. Parts I and II will be identical in each particular year, but the two Courses A and B. are prescribed alternately from year to year.

Candidates will be expected to show a practical knowledge of the methods of anatomical and histological research. They must produce their practical note-books, containing a record of their laboratory work, in order that it may be taken into account in determining the results of the examination.

*In 1952 the examination for both Previous and Final candidates will cover Course B.*

### Course A.

There will be a Practical Test and *four* papers as follows:—

*Paper I.*—Essay.

*Paper II.*—The structure, bionomics, development and distribution of the following groups:—



Protozoa, Porifera, Mesozoa, Coelenterata, Platyhelminthes, Nemertinea and Nematelminthes.

*Paper III.*—The structure, bionomics, development and distribution of the following groups:—

Annelida and the Arthropoda with special reference to Insecta (Entomology).

*Paper IV.*—The structure, bionomics, development and distribution of the following groups:—

Rotifera, Polyzoa, Molluscoidea, Mollusca and Echinodermata.

### Course B.

1. The structure, bionomics, development and distribution of the following groups:—

Hemichordata, Cephalochordata, Urochordata and Craniata.

2. General Biology including Evolution, Heredity, Variation, Cytology, and Geographical and Geological distribution of animals.

There will be a Practical Test and four papers as follows:—

*Paper I.*—Essay.

*Paper II.*—\*The structure, bionomics, development and distribution of Hemichordata, Urochordata, Cephalochordata, Pisces and Amphibia (including fossil forms).

*Paper III.*—\*The structure, bionomics, development and distribution of Reptiles, Birds and Mammals (including fossil forms).

*Paper IV.*—General Biology.

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\*Questions on Comparative Anatomy of the Chordata may be set in either Paper II or Paper III.



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M. Sc.

*(For the Examinations of 1952 and after)*

*(For Graduates with Honours in Zoology)*

A candidate shall be required to offer for examination one of the special groups mentioned below. The special group shall be chosen subject to the approval of the Head of the Zoology Department.

Special groups:—

(1) Annelida.

(2) Pisces.

(3) Platyhelminthes and Nemathelminthes (Helminthology).

(4) Insecta (Entomology).

(5) Reptilia.

Candidates will be expected to acquaint themselves with the current literature pertaining to the special group selected by them.

There will be a Practical Test and *three* papers as follows:—

*Paper I.*—Essay.

*Paper II.*—Special Group.

*Paper III.*—Special Group.

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## MATHEMATICS.

B.A. and B.Sc. Pass.

(For the Examination of 1952)

There will be *three* papers as follows:—

*I.—Algebra.* Inequalities; limits; partial fractions; convergency of series (omitting multiplication of series); matrices, their addition and multiplication; determinants, minors, expansion; simple numerical methods for approximate calculation of roots of equations.

*Trigonometry.* Demoivre's theorem; the exponential, logarithmic, circular and hyperbolic functions of a complex variable; summation of trigonometric series.

*Calculus.* Differential coefficient, definition and interpretation; applications; standard forms; Leibniz's theorem; Rolle's theorem; the mean-value theorem; Maclaurin's and Taylor's theorems without proof, expansions; maxima and minima; partial differential coefficients.

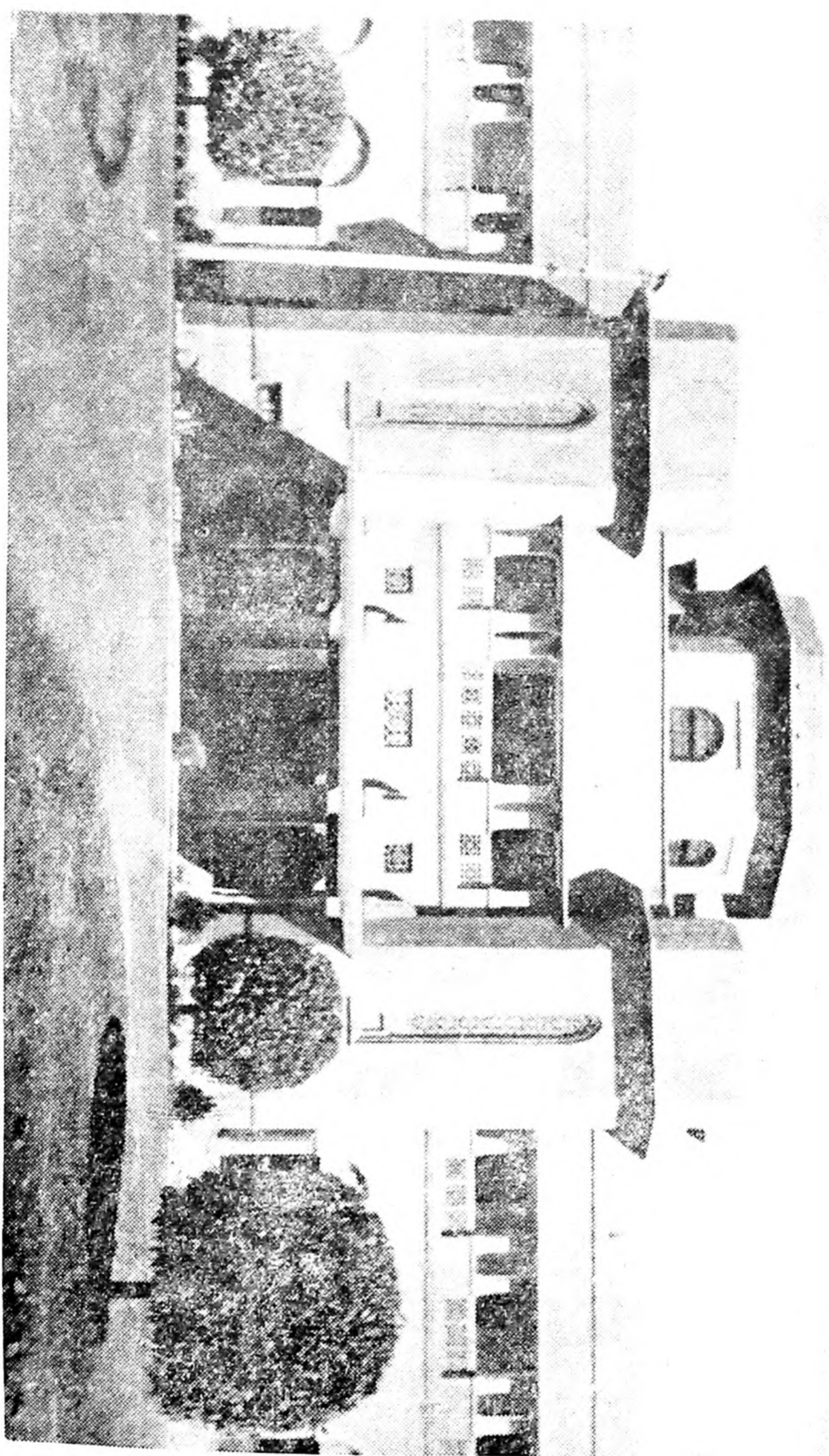
Integration, standard forms, integration by parts; reduction formulæ; definite integrals.

*Differential equations.*—Simple equations of the first order, and linear differential equations with constant coefficients.

*The remaining two papers are to be selected out of the following, subject to the approval of the Head of the Department:*

*II.—Analytical Geometry:* Rectangular Cartesian co-ordinates; polar co-ordinates; the straight line, circle, parabola, ellipse, hyperbola, and general conic; tangent and normal; pole and polar; conjugate lines; intersection of conics; confocal conics.





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*Applications of Calculus to Geometry.* Tracing of simple curves: asymptotes: curvature, envelopes; easy applications to lengths, areas, volumes; Simpson's rule.

*III.—Vectors.* Definition; addition, subtraction and multiplication of two vectors; easy applications.

*Statics.* Copalantar forces including force-diagram and funicular polygon; friction; centre of gravity including theorems of Pappus; work and virtual work; the common catenary.

*Dynamics of a particle.* Two dimensional velocity and acceleration; Newton's laws of motion; rectilinear motion; projectiles; harmonic motion; work, momentum and energy; simple pendulum.

*Hydrostatics.* Fluid pressure; centre of pressure in simple cases; equilibrium of floating bodies; atmospheric pressure; Boyle's and Charles' laws; the barometer and the determination of heights.

*IV.—Mathematical Statistics.* Addition and multiplication theorems of probability with simple applications; interpolation with equal intervals.

Compilation and classification of data; graphs and charts; scrutiny and interpretation of data; frequency distributions; measures of location and dispersion; moments and skewness; Binomial, Normal and Poisson distribution; the normal probability integral; theory of attributes; independence and association; correlation and regression (two varieties); elementary notions of sampling; preliminary ideas about statistical inference; standard errors of mean and of standard deviation; linear and parabolic fitting; applications of the chi square test.

*Book recommended:*

Yule and Kendall: Introduction to the Theory of Statistics.



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B.A. and B.Sc. Pass.

(For the Examinations of 1953 and after)

There will be *three* papers as follows:—

*Paper I.*—Algebra, Trigonometry and Geometry.

*Algebra.* Inequalities; limits; partial fractions; convergency of series (omitting multiplication of series); matrices, their addition and multiplication; determinants, minors, expansion; simple numerical methods for approximate calculation of roots of equations.

*Trigonometry.* Demoivre's theorem; the exponential, logarithmic, circular and hyperbolic functions of a complex variable; summation of trigonometric series.

*Analytical Geometry:* Rectangular Cartesian co-ordinates; polar co-ordinates; the straight line, circle, parabola, ellipse, hyperbola, and general conic; tangent and normal; pole and polar; conjugate lines; intersection of conics; confocal conics. Analytical Geometry of three dimensions, rectangular co-ordinates, equation of a plane and sphere.

*Paper II.*—Differential and Integral Calculus and Differential Equations.

*Calculus.* Differential coefficient, definition and interpretation; applications; standard forms; Leibnitz's theorem; Rolle's theorem; the mean-value theorem; Maclaurin's and Taylor's theorems without proof, expansion; maxima and minima; partial differential coefficients.

Integration, standard forms integration by parts; reduction formulæ; definite integrals.

*Applications of Calculus to Geometry.* Tracing of simple curves: asymptotes: curvature, envelopes; easy applications to lengths, areas, volumes; Simpson's rule.



*Differential equations.*—Simple equations of the first order, and linear differential equations with constant coefficients.

*III.—Vectors.* Definition; addition; subtraction and multiplication of two vectors; easy applications.

*Statics.* Coplanar forces including force-diagram and funicular polygon; friction; centre of gravity including theorems of Pappus; work and virtual work; the common catenary.

*Dynamics of a particle.* Two dimensional velocity and acceleration; Newton's laws of motion; rectilinear motion; projectiles; harmonic motion; work, momentum and energy; simple pendulum.

*Hydrostatics.* Fluid pressure; centre of pressure in simple cases; equilibrium of floating bodies; atmospheric pressure; Boyle's and Charles' laws; the barometer and the determination of heights.

### B. A. and B.Sc. Honours.

(For the Examinations of 1952 and after)

There will be six papers as follows:—

*Paper I. Analysis and functions of a Complex Variable.*

(As for M.A. and M.Sc. Part I, Paper I).

*Paper II.—Differential Equations and Elementary Geometry.*

(As for M.A. and M.Sc. Part I, Paper II).

*Paper III. Statics, Dynamics of a Particle and of a Rigid Body.*

[As for B.A. and B.Sc. Pass, Paper III, and in addition, as for M. A. and M.Sc. Part I, Paper III].



*Paper IV.—Vector Analysis and Advanced Geometry:*

*Vector Analysis:*

[As for M.A. and M.Sc. Part I, Paper IV (i)]

*Advanced Geometry:*

[As for M.A. and M.Sc. Part I, Paper IV (ii), and in addition. Advanced Analytical Geometry in two dimension including system of conics.]

*Paper V.—Differential and Integral Calculus:*

[As for B.A. and B.Sc. Pass, and in addition, as for M.A. and M.Sc. Part I, Paper V]

*Paper VI—Either (a) Spherical Trigonometry and Astronomy:*

*Spherical Trigonometry.* Solution of triangles, including Napiers' and Delambre's analogies and the spherical excess.

*Astronomy.* Geographical latitude and longitude; celestial latitude and longitude; right ascension and declination; latitude and azimuth, atmospheric refraction; precession and nutation; time, aberration; parallax; eclipses and occultation; rising and setting of the stars, sun and moon; the sun-dial; position by observation; the approximate determination of the orbit of a planet by observation; stationery points, phases and brightness; the solar system; Kelper's law; Laplace's hypothesis; the spiral nebula hypothesis; fundamental instruments.

Or (b) *Modern Algebra.*

M.A. and M.Sc. Part I,

(For the Examinations of 1952 and after)

There will be five papers as follows:—

*Paper I.—Analysis and Functions of a Complex Variable:*



Convergence of sequences, series products and definite integrals: definitions of summability (B) and (C1) with simple examples of summable series.

Differentiation and integration in the complex plane; conformal representation; Cauchy's integral theorem; theory of residues; contour integration; the theorems of Taylor, Laurent, Weierstrass, Mittag-Leffler and Liouville; analytic continuation; derivation of Fourier series from Laurents' theorem; simple application of Fourier series.

*Paper II.—Differential Equations and Elementary Geometry.*

*Differential Equations.* Ordinary differential equations of the first order; simple forms of higher order; solution in series; linear total differential equations; system of linear ordinary differential equations; systems of linear ordinary differential equations with constant coefficients; partial equations of the first order; standard forms; Charpit's method; linear partial equations with constant coefficients; Monge's Method.

*Elementary Geometry.* Planes, straight lines, spheres, cones, and other quadrics referred to their principal axes. Plane section of conicoids and generators.

*Paper III.—Statics, Dynamics of a Particle and of a Rigid Body.*

*Statics,* Systems of forces in two and three dimensions; friction; work; virtual work; centres of gravity; strings in two dimensions; stability of a rigid body under coplanar forces; attraction and potential under gravitational forces.

*Dynamics of a particle in two dimensions.* Work; energy; rectilinear motion; projectiles; impact; central orbits; constrained motion of a particle.



*Elementary rigid dynamics.* Moments and products of inertia; principal axes; parallel axes; momental ellipsoids; d'Alembert's principle and the equations of motion; motion about a fixed axis; motion in two dimensions under finite forces; friction; conservation of momentum and energy; simple examples of impact.

*Paper IV—Vector Analysis and Advanced Geometry.*

(i) *Vector Analysis.* Vector product; vector field; divergence; solenoidal fields; the theorems of Gauss, Green and Stokes in vector notation; the differential operators, attraction and potential and the equations of potential theory.

(ii) *Advanced Geometry.* Reduction of quadrics to standard forms, confocal conicoids in standard forms, curves, in space, curvature and torsion, envelopes developable surfaces, lines of curvature and geodesics. Curvilinear coordinates and linear elements.

*Paper V.—Differential and Integral Calculus:*

*Functions.* Definition of continuity and discontinuities of the first and second kinds; continuity of functions of two variables; double and repeated limits.

*Differential Calculus.* Mean-value theorem; Taylor's theorem; partial differentiation and change of variables; maxima and minima; Jacobians; multiple points on plane curves.

*Integral Calculus.* Riemann integration; mean-value theorems; convergence of improper integrals; Beta and Gamma integrals; evaluation of double and triple integrals; expansion of functions in Fourier series (without proof).



**M.A. and M.Sc. Part II.**

*(For the Examinations of 1952 and after)*

(As for M.A. and M.Sc. Examinations of 1952 and after)

**M.A. and M.Sc.**

*(For the Examinations of 1952 and after)*

The Examination will consists of *four* papers as follows:—

*Paper I.—Theory of Aggregates and Functions of a Real Variable.*

*Paper II.—Advanced Analysis.*

Two more papers must be chosen out of the following subject to the approval of the Head of the Mathematics and Statistics Department:—

*Paper III.—Hydrodynamics.*

*Paper IV.—Analytical Dynamics.*

*Paper V.—Tensor Calculus and Relativity.*

*Paper VI.—Mathematical Physics.*

*Paper VII.—Electricity and Magnetism.*

*Paper VIII.—Differential Geometry.*

*Paper IX.—Ballistics.*

*Paper X.—Theory of Functions of a Complex Variable.*

*Paper I.—Theory of Aggregates.* Cantor's and Dedekind's theories of irrational number; enumerable and unenumerable sets; descriptive properties of sets; sets of



the first and second categories; the Heine-Borel theorem; metric properties of sets; Lebesgue's theory of measure; metric density; sets of intervals.

*Functions of a Real Variable.*

(i) Continuity; classification of discontinuities; absolute, semi and approximate continuity; theorems relating to occurrence and distributions of discontinuities; point-wise discontinuity; bounded variation; continuity of functions of two or more variables.

(ii) Differentiation; the mean-value and allied theorems; properties of the derivatives of a continuous function, and of a function of bounded variation; partial differential coefficients; maxima and minima.

(iii) The Lebesgue integral; the fundamental theorem and mean-value theorems; improper integrals; double and repeated integrals; definitions of the Stieltjes and Denjoy integrals.

(iv) Fourier's series; uniform convergence and summability.

*Paper II—Advanced Analysis.*

Gamma functions, hypergeometric functions, Legendre functions. Bessel function, Weierstrassian and Jacobian elliptic functions with simple applications.

*Paper III.—Hydrodynamics.* The equations of motion, Lagrangian and Eulerian methods; velocity potential; sources, sinks and doublets; flow and circulation; permanence of irrotational motion; motion of circular and elliptic cylinders in two dimensions; the Kutta-Joukowski theorem; Stoke's current function; motion of a sphere; vortex motion in two dimensions, elementary properties; rectilinear vortex with circular section; wave



motion, long waves, surface waves, progressive waves; waves at the common surface of two liquids; group-velocity; general equation of sound waves; plane sound waves; vibrations in tubes, normal modes for an uniform straight tube, forced vibrations in a tube together with problems on piston controlled by a spring; equations of viscous fluid motion in two and three dimensions; dissipation of energy. Reynold's number; steady motion between parallel planes; study motion in tubes of circular and elliptic sections; steady rotary motion, steady motion of a viscous liquid due to a slowly rotating sphere.

*Paper IV.—Analytical Dynamics.*

(i) Kinematics:

Degrees of freedom; displacement of rigid bodies. Euler's theorem on rotation about a point; Charles' theorem on the most general displacement of a rigid body; rotation about a fixed point; polhode and herpolhode; precessional motion.

(ii) Motion about a fixed point; Euler's dynamical equation; application to free rotation; complete solution of Euler's equations.

(iii) Moving axes.

Fundamental equations; time flux of a vector relative to a moving axes; motion relative to the earth; Foucault's pendulum; Euler's geometrical equations; rolling of a solid on a fixed surface; a sphere moving on a plane or a surface of revolution.

(iv) Generalised co-ordinates.

Generalised velocities, generalised forces, generalised moments; Lagrangian expression for the kinetic energy; Lagrangian equation of motion; the kinetic potential; ignoration of co-ordinates; Hamiltonian expression for



the kinetic energy; Hamiltonian equation of motion; cyclic co-ordinates; Routh's modified form of the Lagrangian equation, conservative forces; Lagrangian and Hamiltonian equations of motion.

(v) Variational principles.

Hamilton's principle; principle of Least Action; simple applications.

(vi) Theory of Vibrations.

Conditions of equilibrium; stability; statical relations between forces and displacements; potential energy in terms of disturbing forces; free vibrations; orthgonal relations, Normal co-ordinates; forced oscillation; dissipative forces; Rayleigh's dissipation function; free oscillation with friction.

*Books for Consultation:*

Besant: Dynamics.

Routh: Rigid Dynamics.

Whittaker: Analytical Dynamics.

*Paper V. — Relativity and Tensor Calculus.*

*Special Relativity.* Lorentz transformation, Fitzgerald contraction, Fresnel's formula, Einstein's form for Hamilton's principle, mass, momentum and energy, Fermat's principle, Minkowski's 4-dimensional world, stress tensor, electro-magnetic equations; the principle of equivalence.

*Tensor Calculus.* Contravariant and covariant vectors, multiplication, contraction and quotient law of tensors, transformations, fundamental tensors, associated tensors, Christoffel's 3-index symbols, equations of a geodesic, covariant differentiation, Riemann-Christoffel tensor.



*General Relativity.* The condition for flat space-time, Einstein's law of gravitation, the gravitational field of an isolated particle, Schwarzschild's solution, planetary orbits, advance of perihelion, the deflection of light; displacement of Fraunhofer's lines.

*Books recommended:*

Cunningham: Relativity.

MacConnel: Applications of Absolute Differential Calculus.

Eddington: Mathematical Theory of Relativity.

*Paper VI.—Mathematical Physics.*—Place of differential equations in mathematical physics; vibration of string, and allied problems.

Vectors in-dimensional space; special relativity; relativistic equations of motion and energy; variation principles.

Thermodynamics, general classification of formulæ; statistical mechanics; Maxwell-Boltzmann distribution law; Fermi-Dirac distribution law; Bose-Einstein distribution law.

Matrices; special study of Hermetian matrices; orthogonality of functions; transformations of matrices and functions.

Linear harmonic oscillator.

Relativity theory of the photon, derivation of Planck's law; quantum theory of radiation; de Broglie material waves; Schrodinger's wave mechanics.



Structure of the hydrogen atom, classical theory, classical quantum theory and the new quantum theory; perturbation theory; the hydrogen atom.

*Paper VII.—Electricity and Magnetism:*

The electrostatic field, conductors and condensers, systems of conductors, dielectrics; method of images, inversion and conformal representation, spherical harmonics and easy applications; steady currents; permanent magnetism, induced magnetism, induction in circuits, magnetic field of steady currents; Maxwell's equations of the electromagnetic theory of light, the motion of electrons.

*Books recommended:*

Jeans: Mathematical theory of Electricity and Magnetism.

Becker: Electricity and Magnetism.

*Paper VIII.—Differential Geometry:*

Gauss's characteristic equation. Mainardi-Codazzi equations; Organic curves of a surface, lines of curvature, conjugate directions, asymptotic lines, null lines, Isometric lines, geodesics, properties of generators of a ruled surface, lines of striction, principal properties of rectilinear congruences.

*Riemannian Geometry.*

Transformation of Co-ordinates, Riemannian metric, fundamental double tensors, Christoffel three-index symbols, covariant differentiation. Riemann-Christoffel tensor; equations of a geodesic.



*Books recommended.*

Weatherburn: Differential Geometry, Vol. I.

Eisenhart:                   "                   "

Forsyth:                   "                   "

Weatherburn: Riemannian Geometry.

Eisenhart:                   "                   "

*Paper IX.—Ballistics:*

*Paper X.—Theory of Functions of a Complex Variable.*

Theorems of Hurwitz, Jensen and Carleman:  
Poisson-Jensen formula.

Conformal representation and analytic continuation.

Maximum modulus principle together with the elementary properties of Schlicht functions.

Integral functions:—Power Series and Dirichlet's series.

Analytic functions represented by infinite products and elliptic modular functions.

*Books recommended:*

Titchmarsh: Theory of Functions.

Goursat: Mathematical Analysis, Vol. II, Part I,  
Complex Variable.

Copson: Functions of a Complex Variable.



## MATHEMATICAL STATISTICS.

B.A. and B.Sc. Pass.

(For the Examinations of 1952 and after)

### *Paper I.—Theoretical Statistics:*

Interpolation: Divided differences—Newton's formulæ, central difference formulæ.

Simple cases of quadrature.

Laws of total and compound probability; repeated trials; Bernoulli's theorem (statement only); elements of inverse probability; outlines of Baye's theorem; mathematical expectation; elements of the law of large numbers; theorems on continuous probability (without proof); transition theorems (i) binomial to normal (ii) Laplace's central limit theorem (without proof).

Concepts of statistical populations and random samples; histograms and frequency distributions; measures of central tendency—mean, median, mode; measures of dispersion—standard deviation, range, mean deviation quartile deviation; cumulative distribution—ogive and percentiles; moments of a distribution; skewness and kurtosis; binomial and Poisson distribution and its uses; general ideas of association, contingency and correlation;  $m \times n$  contingency tables; descriptive properties of bivariate normal population; coefficient of correlation and regression; correlation ratio; regression equations; least square method; partial and multiple correlation for three variates.

Elements of the theory of estimation and testing of hypotheses.

Tests of significance—(i) Large sample tests, Chi-square and its various uses; standard errors of well known statistics (without proof). Fisher's Z-transformation.



(ii) Small sample tests—"Student's"-t Fisher's-Z, F and their uses; distribution of  $r$  (derivations of the distributions need not be given).

*Paper II.--Applied Statistics:*

(a) Elements of design of experiments and simple surveys. Simple cases of analysis of variance, design of experiments, replication, randomization, local control,, randomized blocks and latin squares.

Preparation of forms, schedules and questionnaires, various sampling procedures, current methods of estimation of area and yield in crop surveys in India.

(b) Application of Statistics in Economice, Agriculture, Industry and Public Health, etc.

General composition and classification of data, graphical representation and interpretation of charts and diagrams, smoothing of data—graduation by the parabola.

Index numbers; trends, seasonals and cyelicals in time series data; correlation in time series (upto but not including harmonic or periodogram analysis).

Elements of vital Statistics, crude and standardised birth and death rates, gross and net reproduction rates, stable and stationary population, elements of life table, the Indian census.

(c) Official Statistics.

Methods of compilation and sources. Important official publications of the Government of India relating to—



- (i) Economics: Industry and trade, price and cost of living Indices, transport.
- (ii) Agriculture: Yields, acreages and livestock.
- (iii) Census: The Census of India.

*Paper III.—Practical:*

*Course for the Practical Examination.*—Scrutiny of data and reconciliation of discrepancies; tabulation and classification of statistical data; graphical representation and interpretation of bar and circular diagrams, time records, histograms, frequency curves and correlation charts. Simple interpolation. Calculation of arithmetic, geometric and weighted averages; construction of simple Index Numbers; preparation of grouped frequency and correlation tables; calculation of moments upto fourth order with adjustments for grouping; calculation of mean standard deviation, coefficient of variation and co-efficient of correlation with standard errors; fitting of Normal curves; use of probability integral for the normal curve; tests of significance— $t$ ,  $z$ ,  $r$ ; Chi-square tests; simple cases of analysis of variance; analysis of randomised blocks and latin squares. Calculation of crude and standardised birth and death rates.

Candidates will be expected to be familiar with the use of standard mathematical and statistical tables, slide rules and simple types of calculating machines.

Laboratory note-books of candidates shall be inspected and marked by examiners, and if they are found unsatisfactory the candidates will be disqualified.

**B.A. and B.Sc. Honours.**

*(For the Examinations of 1953 and after)*

*Paper I:* Analysis and functions of a Complex Variable.  
(Same as B.A. and B.Sc. Honours., Mathematics Paper I)



*Paper II*: Differential Equations and Elementary Geometry.

(Same as B.A. and B.Sc. Hons., Mathematics Paper II).

*Paper III*: Theory of Statistical Inference.

(Same as M.A. and M.Sc. Part I, Mathematical Statistics Paper III).

*Paper IV*: Probability and Probability Distributions.

(Same as M.A. and M.Sc. Part I, Mathematical Statistics Paper IV).

*Paper V*: Differential and Integral Calculus.

(Same as B.A. and B.Sc. Hons., Mathematics Paper V).

*Paper VI*: Advanced Applied Statistics.

Analysis of Stationary time series.

Definitions of a stochastic process, the four well-known types, correlogram and periodogram analysis.

Mendelian segregations and Mendelian ratios, genetic analysis, calculation of linkage values.

Control charts, sampling inspection, O C and A S N curves, double and sequential sampling, theory of runs.

Standardisation of scores, measurement of intelligence, achievement tests, reliability and validity of tests, elements of factor analysis.

### M.A. and M.Sc. Part I.

(For the Examinations of 1952 and after)

*Paper I*: Analysis and Functions of a Complex Variable.

(Same as M.A. and M.Sc. Part I, Mathematics Paper I).



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*Paper II: Differential Equations and Elementary Geometry*

(Same as M.A. and M.Sc. Part I, Mathematics Paper II).

*Paper III:*

Theory of Statistical Inference.

Vector Spaces.

Estimation: Point Estimation. Fisher's Theory.

Interval Estimation—Neyman's Theory.

Testing of Hypotheses: Neyman and Pearsons, theory—simple and composite hypotheses; introduction to Wald's Unified Theory of Statistical Inference; non-parametric inference; Markoff theorem; analysis of variance and covariance (to be treated from the point of view of linear estimation).

*Paper IV: Probability and Probability Distributions.*

Matrices: Bilinear and quadratic forms; elements of hyperspace geometry.

Definitions of probability; Bernoulli's theorem; Bayes' theorem; Mathematical expectation; Law of large numbers (including the Strong law);

Probability in continuum; developments of Laplace's Central Limit Theorem; probability function, distribution function and characteristic functions.

Graduation of frequency curves: Pearson and Gram-Charlier system of curves; Moments of moment Statistics; exact sampling distributions (i)  $x^2$  (ii)  $t$ ,  $z$ ,  $F$ . (iii)  $t$ , intra class correlation (iv) partial and multiple correlations. Wishart's distribution, Hotelling's  $T$  and  $D$ .



*Paper V*: Differential and Integral Calculus.

(Same as M.A. and M.Sc. Part I, Mathematics Paper V).

**M.A. and M.Sc. Part II.**

(For the Examinations of 1952 and after)

*Paper I*: Theory of aggregates and of Functions of a Real Variable.

(Same as M.A. and M.Sc. Part II, Mathematics Paper I.)

*Paper II*: Advanced Analysis.

(Same as M.A. and M.Sc. Part II, Mathematics Paper II.)

*Paper III*: Design of Experiments and Sample Surveys.  
Elements of Group Theory; Galois fields.

Design of Experiments; constructions of designs; Latin squares, hyper Græco Latin squares, incomplete block designs, Lattice designs; Confounded factorial designs; missing plots.

Analysis general theory of analysis of designs and its applications in the above cases.

Sample surveys: theory of large-scale sample surveys.

*Paper IV*:

Practical: On portions covered in M.Sc. Part I, Papers IV and in M.Sc. Part II, Paper III.

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## ASTRONOMY

B.Sc. Pass.

(For the Examinations of 1953 and after)

There will be *three* Papers as follows:—

*Paper I.—General Astronomy.* (Descriptive).

Astronomical Instruments—Telescopes and their Accessories and Mountings, Timekeepers and Chronographs, the Transit Instrument, the Meridian Circle, the Micrometer, Measurement of Photographs, the Spectroscope, and the Sextant; the Earth as an Astronomical Body—its Form, Rotation and Dimensions, Mass and Density, its Orbital Motion, and the Apparent Motion of the Sun; the Moon—its apparent motion, Phases, the Lunar Month, the Orbit, Synodic Motion, its Distance, Mass, Density, Atmosphere, Light and Heat; the Sun—its Distance, Dimensions, Mass and Density, its Rotation, Differences with Latitude, Methods of studying its Surface, the Photosphere, and the Sun-Spots; the Solar Spectrum, Fraunhofer Lines, Kirchhoff's Laws, Reversing Layer and Flash Spectrum, Chromosphere, Prominences, and Corona, and the Study of Sun-Spot spectrum; the Sun's Light and Heat—the Solar Constant, Sun's temperature, Temperature of the Solar Atmosphere; the Planets in General—Names, Distances and Periods, Apparent Motions, Orbits, the Planets' Diameter, Mass, Rotation, Surface Peculiarities, Satellite System; Comets—Number and Designation, Orbits and Origin, Dimensions and Mass, and the Origin of their Light; Meteors—Shooting Stars and Fire-Balls, Number, Velocity and the Length of Path; Meteorites-Meteoric Showers and Radiants, Origin of Meteors and their Connection with Comets; Origin of the Solar System—Attempted Explanation by the Nebular Hypothesis, Hypothesis of Dynamic Encounter, Planetesimal and Tidal Theories; the Stars—Their Nature,



Number and Designation, Stellar Spectra: Observation and Classification, Brightness of the Stars: Magnitude, Visual, Photographic and Photoelectric Photometry, and Distribution of the Stars; the Motions of the Stars, Determination of Proper Motion and of Radial Velocity, Motions of the Stars in Space, Moving Clusters, the Solar Motion; the Luminosities, Temperatures and Diameters of the Stars; Variable Stars—Discovery and Observation Nomenclature and Classification, Light Curves, Cepheid and Cluster Variables; Star Clusters and the Milky Way—Open Clusters, their Distances and Dimensions, Globular Clusters, their Distances, Dimensions, Brightness, Motions, and Distribution, the Magellanic Clouds, the Galaxy or Milky Way, Shape and Dimensions of the Galaxy, the “Local System”; the Nebulæ—General Classification, Galactic Nebulæ, Dark, Diffuse and Planetary, Extra-Galactic Nebulæ: Spiral, Elongated, Globular, and Irregular, Distances, Dimensions, Motions, Brightness and Masses.

*Books recommended:*

H. Spencer Jones: General Astronomy.

*Paper II.—Spherical Trigonometry and Spherical Astronomy.*

Spherical Trigonometry upto the solution of triangles including Napier's and Delambre's analogies.

Problems of Practical Astronomy—Fundamental and Differential Methods, Latitude, Longitude, Time, Right Ascension. Declination and Azimuth, Position of a Heavenly Body, Navigation, Reduction and Correction of Observations, Errors of Observations and Computations.

The Celestial Sphere, Rising and Setting, Twilight; Refraction for small Zenith Distances, Horizontal



Refraction, its effect on the Time of Sunrise and Sunset; Planetary Motions, Kepler's Laws, Determination of the Position and Velocity of a Planet; Time, Sidereal Time, Solar Time, Equation of Time, the Calendar; the Seasons, Planetary Phenomena, Stationary Points, Phases and Brightness; Aberration, Law of Aberration, Annual Abberation in Longitude and Latitude, in Right Ascension and Declination (neglecting the eccentricity of the Earth's orbit); Parallax—the Geoid, Astronomical and Geocentric Latitudes, Geocentric Parallax, the Parallax of the Moon, the Solar Parallax and the Stellar Parallax; Luni-solar Precession and its Physical Interpretation, Planetary Precession, Nutation; Eclipses, Eclipses of the Moon, the Angular Radius of the Shadow Cone at the Moon's Geocentric Distance, the Ecliptic limits, Eclipses of the Sun, the Angle subtended at the Earth's Centre by the centres of the Sun and the Moon at the beginning or end of a partial Solar Eclipse, Ecliptic limits, the Frequency of Eclipses and the Repetition of Eclipses.

*Books recommended:*

Todhunter and Leathem: Spherical Trigonometry.

W. M. Smart: Spherical Astronomy.

*Paper III.—Hindu Astronomy.*

The Sources of Scientific Hindu Astronomy. Hindu Methods in Spherical Trigonometry including Solution of Spherical Triangles and Calculation of the Sine and Cosine Tables. The Gnomon and the other Hindu Astronomical Instruments mentioned in the *Sûrya-siddhânta* by Brahmagupta, Lalla, Śrîpati and Bhâskara II. The Observatories of Jai Singh and the Instruments devised by him.



Divisions of Time—Kalpa, Manvantara and Yuga; Sidereal, Solar, Lunar and Civil Systems of Time. The Ahargana—Calculations relating to Intercalary Months and Omitted Tithis.

The Hindu Theory of Planetary Motion—Concentric, Epicycles, Mandocca and Śighrocca. The Longitudes of Planets and Corrections—Deśāntara, Udayāntara, Bhujāntara, Mandaphala Śighraphala and Cara.

The Hindu Calendar—Tithi, Karaṇa, Nakṣatra and Yoga. Sāyana and Nirayana Reckonings.

The Sun and Moon—Rising and Setting, Moon's Phases and Elevation of the Moon's Horns. Heliacal Rising of the Planets. The Nakṣatras and the Conjunction of the Moon with the Nakṣatras.

Lunar Eclipse—Diameters of the Sun, Moon and the Earth, the Sections of the Earth's Shadow where the Moon crosses it, Moon's Latitude, Duration of the Lunar Eclipse and the Determination of the instants of the Four Contacts.

Solar Eclipse—Determination of the Five Jyās (Udayajyā, Madhyajyā, Dṛkkṣepajyā, Dṛgjyā and Dṛggatijyā), Lambana, Nati, Duration of the Solar Eclipse and the Determination of the Times of the Four Contacts. Akṣa, Ayana, Śaraja and Bimbīya Valanas.

Practical Work will be compulsory for every student.

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## EUTHENICS.

*(For students of the Isabella Thoburn College only)*

B.Sc. Pass.

*(For the Examinations of 1952)*

Candidates who have passed the Intermediate examination with Biology, shall be eligible for admission to the Euthenics course. The course shall comprise of the following subjects:—

*I.—Applied Chemistry.*

Three papers in Theory.

One practical examination of four hours duration.

*II.—The Family.*

Two papers.

*III.—Living Science.*

Three papers in Theory.

One Practical examination of four hours duration in Applied Biology.

*IV.—General English.*

*I.—Applied Chemistry—(3 Papers and a Practical Examination).*

A. Nutrition.

B. Biochemistry.

C. Household Chemistry.

*II.—The Family—(2 Papers).*

A. Physiological Development.

B. Psychological Development.

C. Cultural and ethical Development.

D. Sociological considerations.



*III.—Living Science—(3 Papers and a Practical Examination).*

A. Home Science.

1. Household Economics.
2. Home Planning and Decoration.
3. Household Sanitation and Engineering.
4. Household Management.

B. Land and rural improvement.

1. Horticulture.
2. Dairying.
3. Poultry raising, bee raising, etc.

C. Applied Biology.

1. Zoology, Parasitology, etc.
2. Botany.
3. Preventive Medicine.

*IV.—General English.*

*N.B.*—For Paper II in Living Science, students may be required to take a short Course at the Agricultural Institute at Allahabad under the supervision of one of the teachers accompanying the students.

*I.—Applied Chemistry.*

A. Nutrition.

1. Historical introduction to the study of nutrition: meaning and significance.
2. The body's need for energy, how food furnishes energy, calorie requirements and factors affecting energy requirements, basal metabolism, reducing or increasing calorie value of diet.



3. Biological and physiological values of common foods. Co-efficient of digestibility, Nutritive value of Indian food stuffs.

4. Protein: body needs and how met—requirements for different individuals and factors affecting—foods rich in complete protein; nitrogen balance—provision of nitrogenous protein in vegetarian, low income, isolated groups.

5. Minerals: body needs and how met—daily requirements and factors affecting—foods rich in various needed minerals—availability of minerals in foods.

6. Vitamins and their functions: A B complex, C; body's need and specific requirements at different periods of life; deficiency diseases; food source.

7. Body's need for water and fibre, control of water intake.

8. Effect of cooking, storage, drying, commercial preparation on food values.

9. Menu building: adequate diets for normal adults in India—meal planning: vegetarian, animal, European—diet in pregnancy and lactation—infant feeding—food for children, schools, boarding groups.

10. Diet therapy: Low calorie, high calorie diets—diets of varying texture and residue—high and restricted carbohydrate diets—high and low mineral diets—varying protein content—invalid and older people's diets.

11. Food for individuals with specific diseases and other difficulties: tuberculosis, anæmias, cardiac diseases, rheumatic fever, toxemias of pregnancy, neurological diseases, typhoid, colitis, dysentery, diarrhoeas—fermentative and putrefactive, constipation, gout, gall bladder



diseases, gastric ulcer, nephritis, nephrosis, urinary calculi. Diet treatment in surgery—pre-and post-operative, food allergy. Weighed diets.

12. Analysis of milk.

13. Cost and racial problems in food.

14. Methods of differentiating well-nourished and poorly nourished individuals.

15. A nutrition Policy for India.

*B. Biochemistry:*—Cells and cell activity—foods, their properties and classification—chemistry of vitamins—enzymes—Digestion and general metabolism—absorption and assimilation, growth—excretion: factors influencing, constipation—significance of nitrogenous constituents of urine—biochemistry of blood, lymph, body fluids, respiration.

*C. Household Chemistry:*—Hardy water—soaps and other detergents—methods of dry cleaning—insecticides—disinfectants—abrasives and cleansing agents—stain removers—glue—dyes, textiles, marking ink, cosmetic and toilet preparations—drugs—chemistry of cooking process—chemistry of dyeing and bleaching—domestic filters—microscopic and chemical composition of cotton, jute, silk, woollens.

*Practical:*—In addition to the more technical laboratory periods each week, students will work out nutritional problems and other problems in applied chemistry in connection with the Nursery School children and their families, with the village children and their families, and with other college students.

*Text References:*—

Sherman, H. C. and Ladford, C. S.: *Essentials of Nutrition.*



Sherman: Chemistry of Food and Nutrition.

Bogert and Porter: Dietetics Simplified.

McLester: Nutrition and Diet in Health and Disease.

Berry: Chemistry Applied to the Home and Community.

Peterson, Skinner and Strong: Elements of Food Biochemistry.

Schmidt: Fundamentals of Biochemistry with Laboratory Experiment.

Taylor and Taylor: Elementary Physical Chemistry.

Bull: Physical Biochemistry.

## *II.—The Family.*

### *Background.*

1. Survey and definition of terms "Home," "Family" etc.

2. Kinds and types of family.

3. Historical development of family in India; the family in prehistoric India, in Vedic times, changes reflected in laws of Manu, changes with Moslem and other invasions. Western influences on Indian family life.

4. Changes affecting the Indian family: impact of India's industrial and economic conditions on the modern family: cultural, political, psychological and religious aspects.

5. The modern family in India to-day; methods of study, special family case studies.

6. Persisting ideals of the Indian home: adoption and continuation of meaningful and worth while customs. New values to be incorporated.



A. Developing the family : physiological considerations.

1. *Establishing a family.*

Factors in choice of mate, marriage arrangements  
Planning opportunities for betrothed and parents. Value  
and content of premarital examination. "The period  
of discovery" : early marriage adjustments and attitudes.

Adjustments in joint family "in-laws."

2. *Children.*

Embryology of the human organism.

Pregnancy, hygiene of mother and child (foetus).  
infancy: characteristics, needs and care of the young  
child.

The growing child.

Development of the various body systems: digestive  
nervous, blood, respiratory, endocrien, excretory,  
genital, sensory systems; evaluations of growth  
measurements and standards, relationship  
between aspects; activity : motor, postural,  
perceptual development.

Physical care at various age levels.

Aids in total personality development, habit training.

3. *Adults:* Physiological changes and adjustments.

B. Psychological Development.

1. Child Psychology.

Methods of child study.

Mental development: mental testing, individual  
differences, imagination.



**Creative work:** interests and fostering of aptitudes: hobbies, pets, etc.

**Emotional development** and training of original tendencies.

**Development of social traits** according to age level and environment.

**Exceptional and problem children:** the supernormal or mentally superior child; the handicapped: mental defectives; deaf-mutes. blind; the delinquents; "Problem" children: ego-centrism, exhibitionism, screaming, tantrums. etc., the unwanted, illegitimate, adopted child. **Errors:** modern ideas of obedience, punishment and authority.

## 2. The challenge of adolescence.

**Adult attitudes towards adolescence.** Influence of physical growth, maturing of reproductive system, physical hygiene and problems incidental to growth and development, mental development, measurement of intelligence; special abilities and disabilities.

**The question of work and choice of career or a profession.**

**Learning to use leisure time.**

**A social conduct:** incorrigibility; stealing.

**Evading reality:** day-dreaming and romancing, cheating, truancy, drinking.

**The adolescent and his companions.**

**The importance of friends, boy and girl relationships, "crushes."**

**Attitudes towards sex, sex-talk and reading.**



The individual as a whole.

Needs of parents.

3. Mental Hygiene or guidance throughout the individual development.

Factors in the development of integrated personalities.

Intelligent standards *versus* cultural inertia; frustration and aggression.

Psychoneurosis and classification of mental disorders.

Factors in maintenance of mental health. Psychotherapy.

#### C. Cultural and Ethical Development.

1. Education: problems and guidance in the experiences of the child in nursery school, kindergarten, middle school, high school, college.

2. Appreciation of Indian Arts and of arts of other cultures: art in the home, use of pictures, picture books, etc.: suitable decoration for the home; principles of costume and design: art appreciation; handicrafts.

3. Music in the home; brief survey of the history of music; analysis and illustration of the various forms of musical composition; development of appreciation and understanding of good music, oriental and western: concise study of instrumentation and form, suitable records of the great masterpieces; relation of music to personality development.

4. Literature in the home: study of the masterpieces of literature about the home: novels, poem, short stories, dramas, essays, etc., selection of a library for the home; especial study of literature suitable for children; creation of stories for Indian children with suitable illustration.



5. Integretion of character concepts in the total living of the home.

D. Sociological considerations. *Place of the family in Indian Society.*

1. Community patterns and characteristics: problems and characteristics of urban and rural life; adjustments of basic needs to social pressures.

2. Social ethics : ideals, obligations, community tensions, social actions.

3. The family's responsibility in the development of the community, especially woman and civic responsibilities: responsibilities of woman whether electors or members with relation to functions of local authorities—municipal boards, district boards, “panchayats”—such as lighting, conveyances, education of children and adults, handicrafts, activities centred in “panchayat-ghars”, parks, safety, public health with special reference to dispensaries, quarantine, inoculation, cleanliness of streets and markets, pure food, pure water; education committee—court of domestic relations.

4. Community organisation for social work: study of local agencies for community planning and co-ordination—techniques for special work—methods and types of organised effort.

5. The place and responsibility of the Indian community in promotion of successful family life: old ideals and usable Indian patterns—educational agencies—religious organisation—social and recreational agencies—health promotion institutions—occupational opportunities.

6. The nation's responsibility in family development.

7. Family relations as a basis for better world order.



*Practical Work:* An average of five periods each week with some experience in family and individual case studies; experience in nursery school observation, organisation, and direction; school recreation; village health and social work, with practical application of principles from each course incorporated in definite, correlated projects.

*Texts and Books for Reference.*

Mukerjee: Man and his Habitation.

Lowie: Primitive Society.

Venkateswara: Indian Culture through the Ages.

Jung (ed): Modern Marriage.

Rand Sweeng, Vincent: Growth and Development of the Young Child.

Strange: Introduction to Child Study.

Wiggers: Physiology in Health and Disease.

Brown: The Sociology of Childhood.

Flugel: Psycho-Analytic Study of the Family.

Strain: New Patterns in Sex Teaching.

Allport: Personality.

Dorcus and Shaffer: Text-book of Abnormal Psychology.

Howard and Party: Mental Health: Its Principles and Practice.

Russel and Wilson: Art Training through Home Problems.

Colend: Your Community.

Sorokin Zimmerman: Principles of Urban-Rural Sociology.



Dickinson: Appreciation of Music.

Havell: Indian Sculpture and Painting.

Halдар: Art and Tradition.

### *III. Living Science.*

#### *A.—Home Science:*

##### **1. Household Economics.**

Family budgets: sources of income and allotment of expenditure between various items—balancing the budget—maintenance of necessary standards at various economic levels—the child and money managements.

Consumption: Human wants, characteristics of wants, classification of wants, Law of consumption, Law of demand, Law of diminishing utility, Law of equipmarginal utility, Engel's law of consumption, relation between saving and spending.

Money and Credit: money, its functions, different types of money, relation between money and prices, credit instruments, cheques, drafts, bills of exchange, promissory notes.

Banks: Functions, types of banks of India, balance sheet of a bank, saving and investments, avenues for investment, stocks and shares.

##### **2. Home Planning and Decoration.**

Historical Survey: From East to West and West to East.

Requirements for successful decorator.

Home Planning: structure, exposure, arrangements, family requirements.



Colour : Aspects, rhythm, harmonics, practical factors.

Principles of arrangement.

Backgrounds : purpose, use and decoration.

Accessories : purpose, use and decorative effect.

Flowers and their arrangements.

Problems relative to the care and decoration of specific rooms.

Indian decorative arrangements.

The Home Beautiful.

3. Household Sanitation and Engineering: ventilation, humidity, heating (house heating, hot water, etc.), cleaning, physical disinfection, plumbing, protection against fire hazards, house cooling, illumination, water, sound, sewage disposal, rainfall disposal, disposal of human excreta, screening, markets, radio elementary knowledge of generators and motors, pressure cookers, open fireplaces, local cooking apparatus.

Village Sanitation : wells, roads, latrines, waste disposal.

4. Home Management.

Underlying principles, health and economy, Housewife's responsibilities, arrangements of daily marketing and purchase of household supplies, distribution and storage, menu planning, providing for care and cleaning of house, training and management of servants.

Participation of other members of family in budget making, provision and planning for improvements. Teaching possibilities for the child.



Family responsibility in relation to servants.

Consideration of adjustment's needed as India becomes more industrialised.

*B.—Land and Rural Improvement:*

1. Horticulture.

The Home garden : utilization of land around dwellings, schools and other public buildings so as to increase their beauty and produce flowers, fruits and vegetable for home use or for market-soils, elementary classification, best types for gardening, methods of soil improvement, manures and fertilizers.

Vegetable gardening : selection of site, layout and planning of garden to provide a succession of crops, preparation of seedbed, sowing of seeds, transplanting, weeding, irrigation, harvesting, preparation and care of nursery beds, raising, preservation and testing of vegetable seeds, detailed study of the following groups of vegetable crops, root, bulb, tuler, kohl, salad, gourd, legumes, etc., control of insect pests and diseases.

Ornamental gardening : principles of landscape gardening, landscaping of houses, churches and school buildings, establishing and care of lawns selection, planting care and pruning of shrubs, vines and trees.

2. Dairying.

The production of clean and safe milk, milk testing, bacteria important in milk and its products, and methods of their control.



Manufacture of ghee, khoa, dahi, channa and other indigenous products with some consideration of products of exotic products common in India.

Care and sanitation of milk utensils in the household.  
Feeding and care of dairy animals, including goats.

3. Poultry raising, bee raising, care of domestic animals.

Feeding and care of poultry, value of poultry products in the diet.

Care and management of honey bases, value of honey in diet.

Meat cuts and the curing of meat.

Care and choice of pets.

### *C.—Applied Biology.*

1. Zoology: Cell as unit of structure and function in living organism—cell division—different kinds of tissues—histology of chief organs—spermatogenesis—oogenesis—fertilisation—embryology—evolution and heredity—practical application of genetics—survey of animal kingdom.

Parasitology: parasitic protozoa—Platyhelminthes, Nematelminthes—common protozoal diseases: amœbic dysentery, malaria, kala-azar, tropical ulcer, treponemata, syphilis, yaws.

Insects: classification; insects of economic importance; housefly, mosquito, etc.

2. Botany.

Survey of plant kingdom: Thallophyta, Bryophyta, Pteridophyta, Spermatophyta.



Bacteria: Morphology, reproduction, nutrition and classification.

Household bacteriology, potability of drinking water, milk and other food, Pathogenic, Bacteria: disinfection, pasteurization, sterilization.

Fung: moulds—common house-hold ones; reproduction, nutrition, etc.

Mushrooms: edible and poisonous.

Algæ: mode of nutrition—common ones in Cyanophyceæ and Chlorophyceæ.

Economic importance of Angiosperms with special reference to food and fibre plants, rubber, timber, drugs, etc.

Food Adulterations.

Fruit preservation.

Evolution in plants.

Plant breeding.

### 3. Preventive Medicine.

The Physical examination, medical inspection of schools, school clinics.

Conservation of sight and hearing, care in organic difficulties.

Infant and child hygiene.

Industrial hygiene.

Sex hygiene.

Inoculations and other methods of control in arrest of specific diseases.

Nursing care, first and principles aid practice.

Common poisons and their antidotes.



Care of sick in home.

Hospitalization.

Study and participation in rural clinic; needs and possibilities of village health teaching.

*Practical:* In addition to projects in connection with Nursery School and Social work in villages near Isabella Thoburn College, it is hoped that the group may spend a short period at the Agricultural Institute in Allahabad. They would live in one of the Home Economic cottages, manage it and take lecture and practical work from the Living Science Major. Practical work for the morning might include (a) work in rural clinic under supervision of doctor; (b) Social survey and health teaching in neighbouring villages with attempt each year to establish one "Model" home which they plan, decorate and work through (See "A Scheme for Reconstruction in *Home of the villages of the United Provinces*" Home Economic Department Agr. Inst.); (c) work in social service day nursery school; (d) management of cottage including planning and cooking of meals, management of servants, budgets, etc. Each group of students to have three weeks in each experience. The afternoon would be spent in lecture work and study.

*Text and Reference Books:*

Kyrk: Economic Problems of the Family.

Andrews: Economics of the Household.

Whitman: Household Physics.

Whitman: First Aid for the Ailing House.

Firminger: Manual of Gardening.

Hayes: Fruit Growing in India.



Buchanan: Bacteriology.

Stitt Clough: Practical Bacteriology; Hæmatology and Animal Parasitology.

Herrick: Insects Injurious to the Household and Annoying to Man.

Smith, Overton etc. : A Text-book of General Botany.

Coulter Barnes and Cowlds: Text-book of Botany.

Hill: Economic Botany.

Sargent: Plants and their Uses.

Robbins: Botany of Crop Plants.

Hold: Manual of Plant Diseases.

Rosenau: Hygiene and Preventive Medicine.

Dunn and Pandaya: Indian Hygiene and Public Health.

Premier: Text-book of Histology.

Shafer: Embryology of Chick.

Shull: Evolution.

Shull: Heridity.

Hurst: Mechanism of Creative Evolution.

Hegner: Root.

Augustine: Animal Parasitology.

Kerr: Text-book of Zoology for Medical Students.

Snodgrass: Principles of Insect Moryhology.

Thomason: Biology for Everyman.

Imms: Text-book of Entomology.

IV. *General English*—Same as Paper I and II of English (General Section) as detailed in the course of study for the B.A. Pass Examination.

**B. A. Pass.**

*(For the Examinations of 1953 and after).*



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B.Sc. Pass.

*(For the Examinations of 1953 and after)*

Candidates who have passed the Intermediate Science Examination with Biology or Home Science (including Organic Chemistry) shall be eligible for admission to the Euthenics course. The course shall comprise of the following subjects:—

*A—Applied Chemistry.*

Three Papers in Theory.

One Practical examination of four hours duration.

*B.—The Family.*

Three Papers.

*C.—Living Science.*

Three Paper in Theory.

One Practical examination of four hours duration.

*D.—General English.*

*A.—Applied Chemistry—Three Papers and a Practical Examination.*

*Paper I.—Nutrition.*

*Paper II.—Biochemistry.*

*Paper III.—Household Chemistry.*

*B.—The Family—Three Papers.*

*Paper I.—The Home.*

*Paper II.—Physiological Development.*

*Paper III.—Psychological and Sociological Development.*



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*C.—Living Science*—Three Papers and a Practical Examination.

*Paper I.*—Household Physics and Engineering.

*Paper II.*—Household Botany.

*Paper III.*—Household Zoology.

NOTE—Botany and Zoology are taught in alternate years, to the combined First and Second year classes. The Practical examination given at the end of the First year will cover Physics, and either Botany or Zoology, whichever is taught that year. The Practical examination given at the end of the Second year will cover Botany and Zoology, only.

*D.—General English:*

NOTE:—Students may be required to take a short course (of two to three weeks' duration) at the Agricultural Institute at Allahabad, during their Final year.

*A.—Applied Chemistry:*

*Paper I—Nutrition.*

Relation of Nutrition to health. Body's energy requirements: use of food as fuel. Nutritional characteristics of the chief types of food: Effect of cooking, storage, drying, commercial preparation and so forth on food values. Menu building.\* Food for individuals with specific diseases and other difficulties (tuberculosis, anaemias, cardiac diseases, rheumatic fever, toxemias of pregnancy, neurological diseases, typhoid, colitis, dysentery, diarrhoeas, constipation, gall bladder diseases, gastric ulcers, diseases of the kidneys, deficiency diseases, common childhood diseases); diet treatment in surgery (pre-and post-operative) and in food allergy. Cost and racial

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\*End of First year course.



problems in food. Food service in institutions. A nutrition policy for India.

Practical work:—Demonstration and experimental projects to be carried on with the use of white rats and pigeons. Assistance in the College dining room for a period long enough to acquaint the student with procedure and to make a calculation of dietary efficiency of the food stuffs problems along with the study of energy, proteins, vitamins, minerals, menu planning and diet therapy.

### *Paper II—Biochemistry.*

Such elementary Physical Chemistry as is involved in the topics which follow. The chemistry of carbohydrates, lipids and proteins. Enzymes. The chemistry of vitamins. Digestion. Absorption and detoxication.\* Blood. The Chemistry of respiration. Metabolism of carbohydrates, lipids and proteins. Energy metabolism. Inorganic metabolism and water balance. An elementary consideration of hormones.

*Practical work*—Physical chemistry—simple experiments involving the determination of approximate pH by indicators; buffer solutions; dialysis, colloidal dispersions, etc. Properties and identifying tests for carbohydrates, lipids and proteins. Saponification number. Isolation of fat, phospholipid, cholesterol, albumin and globulin from eggs.

Isolation of casein from milk. Composition of saliva. Action of enzymes-e.g. ptyalin, pancreatic amylase, pancreatic lipase-Blood-constituents, and detection of blood stains.

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\*End of First year course.



### *Paper III—Household Chemistry.*

Cleansing reagents: soaps and detergents, dry cleaning agents, stain removers, tarnish removers and abrasives. Water: hard and soft waters, purification and softening of water. Disinfectants. Insecticides DDT, sulphur dioxide, hydrogen cyanide, naphthalene, gammexane, pyrethrum, rotenone—the different method: of application. Textiles. \*Dyes; dyeing and bleaching. Marking inks, Chemical changes in cooking and in fermentation—simple reactions only, e. g. carbon dioxide in bread and cake-making. Bari and other Indian food preparations. Chemistry of cosmetics and toilet preparations. Drugs.

#### *Practical work.*

Household preparation of one or two types of soaps. Qualitative tests for the presence of various ingredients in soaps. Dry cleaning an article. Removal of one or more of the following groups of stains: (a) polishes, paints, coal-tar, etc; (b) coffee, cocoa, tea, blood, etc; (c) iodine, iron rust, acid stains; (d) inks; (e) grease and gravy. Removal of tarnish from two of the common metals: aluminium, brass, iron, steel, silver, gold. Chemical examination of textile fibres (cotton, linen, silk, wool). Tests for the presence of fibres in a given union cloth—e.g. cotton and wool, or cotton and silk, Distinction between rayon and silk. Preparation of azo-dye (methylochrome). Recognition of hardness in water; determination of its type. Preparation and analysis of baking powders; yeast and its culture. Qualitative analysis for inorganic ingredients of at least two toilet preparations. Preparation of a household disinfectant. Javelle water: its preparation and application. Use of bleaching powder and of hydrogen peroxide as bleaching agents. Purification

\*At this point a division of the course will be made. Each section will be covered in alternate years with First and Second year classes combined.



of water: distillation, various method of filtration, coagulation.

*Books recommended:*

Bogert: Dietetics simplified.

Bogert: Nutrition and Physical Fitness.

McLester: Nutrition and Diet in Health and Disease.

Proudfit and Robinson: Nutrition and Diet Therapy.

Rose: Feeding the Family.

Rose: Foundations of Nutrition.

Sherman: Chemistry of Food and Nutrition.

Sherman and Langford: Essentials of Nutrition.

Anderson: Essentials of Physiological Chemistry.

Harrow: Textbook of Biochemistry.

Harrow and others: Laboratory Manual of Biochemistry.

Kleiner: Human Biochemistry.

Mitchell: A Text-book of Biochemistry.

Beery: Chemistry Applied to Home and Community.

Hartsuch: Introduction to Textile Chemistry.

Hartsuch: Textile Chemistry in the Laboratory.

*B.—The Family:*

*Paper I—The Home.*

Aesthetics of home planning and furnishing. Practical house planning, site, exposure, family requirements, house plans, structure, sanitation, costs, etc. Practical



home-furnishing: furnishing costs and budgets, furniture arrangement, selection of furniture, rugs, draperies, accessories, lighting, flower arrangement, pictures, etc.

The place of management in home-making and family life. Time and energy management in home-making. Family finance management: family budgets, money and credit, banks, market and price mechanism, savings and investments. Family housing management. Managerial aspects of feeding the family, clothing the family, operating the household, planning for family health and recreation.

The arts in the Home: Appreciation of Indian Arts and arts of other cultures—painting, architecture, music, literature, sculpture. Influence of the arts upon personality development. Choice of pictures for the home. Music in the home: development and understanding of good music. Literature in the home:—building a home library, study of literature suitable for children. Hobbies for the family.

### *Paper II—Physiological Development.*

Embryology of the human organism. Pregnancy; hygiene of mother and foetus. Characteristics, needs and care of the infant. Physical growth of the child at various age levels. Development of the various body systems, digestive, nervous, blood, respiratory, endocrine, excretory, genital, and of the sense organs. Diseases of childhood; inoculations and other methods of control or arrest of specific diseases.

Physiological changes and adjustments in adolescents and adults. Physical hygiene. The physical examination: annual, pre-marital, before entrance into school, during pregnancy, etc. First aid principles and practice. Common poisons and their antidotes. Care of the sick in the home. Conservation of sight and hearing: care in



organic difficulties. Hospitalisation. Sanitation; a study of the needs and possibilities of health teaching in the city and the village.

*Paper III—Psychological and Sociological Development.*

The Child.—Methods of child study. Measurements, standards and inter-relatedness of growth. Relationship between aspects of activity; motor, postural, perceptual development. Mental development; sensations, perceptions, learning, habits, imagination, aptitudes, individual differences, mental tests. Emotional development. Social development: factors in personality, maturation, play, group relationships, hobbies. Modern ideas of obedience, punishment and authority. Exceptional and problem children: mentally superior, mental defectives, handicapped, deaf-mutes, blind, delinquents, egocentrism, exhibitionism, screaming, tantrums, etc. The unwanted, illegitimate, adopted child.

The challenge of adolescence—Influence of physical growth, maturing of reproductive system, physical growth problems incidental to growth and development. Mental development: measure of intelligence, special abilities and disabilities. Social development: social conduct (*e. g.* incorrigibility, stealing, cheating, truancy, drinking). Learning to use leisure time. The adolescent and his companions: boy and girl relationships. etc. Special adolescent consideration: choice of a career, choice of a mate, attitudes toward sex; evading reality (*e. g.* day-dreaming, romancing).

Parent-child relationships. Mental hygiene or guidance throughout the individual's development. Factors in the development of integrated personalities and character development. Problems and guidance in the experiences of the child in nursery school, Kindergarten, middle school, high school, college.



Kinds and types of families. Place of the family in society. Problems and characteristics of urban and rural life. Indian types of family. Types of marriage. Changes effecting the Indian Family. Impact of India's industrial and economic conditions on the modern family: Cultural, political, psychological and religious aspects.

Ideals of the Indian home. Pressure on family life. Joint family as a system of mutual help. The future of the Indian Family. The Family and the State. Family Disorganisation, Causes and Cure.

*Practical Work:—*

Some experience in family and individual case studies; experience in nursery school observation, organization, and direction; school recreation; village health and social work, with practical application of principles from each course incorporated in definite, correlated projects.

*Books recommended:—*

Nickell and Dorsey: Management in Family Living.

Lewis: Decorating the Home.

Rutt: Home Furnishing.

Cheyney: The World of Art.

Havell: Indian Sculpture and Painting.

Halдар: Art and Tradition.

Sherborn: The Child.

Gilbert: Biography of the Unborn.

Scheinfeld: You and Heredity.

Best and Taylor: The Human Body.

Kugelmas: Growing Superior Children.

Breckenridge and Vincent: Child Development.



Morgan: Keeping a Sound Mind.

Baker: Introduction to Exceptional Children.

Cesell: Infant and Child in the Culture of Today.

Rand, Sweeney and Vincent: Growth and Development of the Young Child.

Strang: Introduction to Child Study.

Folsom: The Family and Democratic Society.

Baber: Marriage and the Family.

Nehru: Our Cause.

O'Malley: India's Social Heritage.

Mawrer: Family Disorganization.

Rosenace: Hygiene and Preventive Medicine.

Mukerjee: Man and His Habitatia.

Hindu Code Bill (Law Publication).

*C.—Living Science:*

*Paper I.—Household Physics and Engineeing.*

NOTE:—As this subject is meant for non-mathematics students, its treatment will be based on elementary mathematics only. Emphasis will be given chiefly to applications of the principles of Physics in the household.

1. General properties of matter and Mechanics—Elasticity and its applications; fluid pressure pumps, simple gauges, barometers and weather forecasting. Syphon and its applications; hydraulic pressure. Home water supply. Bernoulli's principle and its simple applications. Gravity and gravitation and its application in geology (geophysical prospecting). Surface tension and capillary phenomena. Machines in the Home. Rela-



tive density; hydrometers and their uses. Centrifugal machines.

2. Magnetism and Electricity—Terrestrial magnetism; electromagnets and their uses. Condensers. Ohm's Law. Galvanic cells; accumulators and their grouping. Thermopile. Electrolysis; electroplating and electrotyping. Heating, cooking and lighting appliances in the home. Direct and alternating currents. Dynamos and alternators. D. C. motors. Induction coil. Transformers and converters. Telephone, microphone, loudspeakers. Pick-up of a gramophone. Home electrification. Photoelectricity and "talkies". Triode valve and its uses; wireless. X-ray and its applications.

3. Optics—Propagation of light. Mirrors, lenses, and prisms. Defects of mirrors and lenses. Dispersion; rainbow. Colour of bodies. Colour matching and colour harmony. Helmholtz theory of colour vision. Principles of arrangement of backgrounds in decoration. Photometry. Illumination of the home. Problems relating to illumination and decoration of specific rooms. Ultraviolet and infra-red radiations and their uses. Defects of vision and their remedy by lenses. Camera and photography. Colour photography, telescopes, microscopes, optical lanterns, binoculars, etc. Cinematography. Polarisation and its application.

4. Sound—Nature of sound and its transmission in the home. Echoes and Doppler's Principle. Sound ranging. Supersonics and applications. Vibration of strings and air columns, and their applications in piano, violin, flute, sitar, organ, etc. Characteristics of musical sound. Musical scales. Elementary ideas about acoustics of buildings. Gramophone; recording and reproduction of sound.

5. Heat—Temperature. Thermometers. High and low temperature thermometry. Expansion and its appli-



cations; balance wheel, compensated pendulum, thermostat. Refrigeration; ice machine. House cooling and air-conditioning. Vapour pressure and humidity; rain, snow, etc. Pressure cookers. Wet and dry bulb hygrometer. Conduction, convection and radiation and their applications in the household. Ventilation. House heating devices. Mechanical equivalent of heat. Steam and oil engines. Protection against fire-hazards.

*Practical Work*—Repairing and care of simple home machines. Repairing of electric appliances. Elementary repairs in house electrification. Electroplating. Silvering. Photography. Soldering. Testing of specific gravity. Charging of accumulators. Making a one-valve radio receiver.

*Paper II.—Household Botany.*

1. A general survey of plant kingdom giving general characters of Thallophyta, Bryophyta, Pteridophyta, Spermatophyta (Gymnosperms and Angiosperms).

2. The main facts and principles of mineral nutrition (plant food), transpiration, respiration and photosynthesis.

3. Bacteria:—

(a) Their morphology, reproduction and mode of nutrition.

(b) A study of (i) useful and (ii) harmful bacteria.

(c) Household bacteriology—Potability of drinking water, milk and other foods. Methods of their disinfection.

4. Fungi:—

A study of the life-history of



- (i) Mucor, Aspergillus, and Fusarium, causing common storage diseases of cereals, fruits and vegetables, and their methods of control.
- (ii) Yeasts, used in fermentation and as sources of vitamins.
- (iii) Penicillium as source of antibiotics.
- (iv) Agaricus campestris (edible) and Amanita phalloides (poisonous) mushrooms.
- (v) Rusts and smuts of cereals; late blight of potato; wilt and damping off of some common plants.

5. Higher Plants:—

A study of plants yielding (a) Food, (b) Fibre, (c) Timber, (d) Rubber and (e) Drugs.

6. Food adulteration.

7. Plant breeding etc—P. 550, 551, 552 to middle of 553.

7. Plant breeding:—

The role of plant breeding in obtaining improved and disease resistant varieties of seeds.

8. Grow more food Campaign:—

(a) Fruits and vegetable for home use; soils, elementary classification, best type for gardening, methods of soil improvement, manures and fertilizers.

(b) Planning for vegetable garden, succession of crops, sowing of seeds, transplanting, etc.

9. Ornamental gardening.



*Practical.*

Candidates will be expected to:—

- (1) identify different types of bacteria and the fungi studied;
- (2) show, by experiments, the presence of fungal and bacterial flora in air, water, milk, food and soil;
- (3) know the working of simple physiological experiments dealing with absorption, transpiration, respiration and photosynthesis, and
- (4) study the general and floral characters of plants yielding food, fibre and drugs.

*Text and Reference Books.*

Sargent: Plants and their uses.

Robbins and Ramaley: Plants useful to men.

J. Pfeiderer; Glimpses into the life of Indian Plants.

Hayes: Fruit growing in India.

Buchanan: Bacteriology.

Albert Howard: Crop production in India.

Hold: Manual of plant diseases.

Firminger: Manual of Gardening

Lawson and Sahni: Text Book of Botany.

Smith Orerten, etc.: A text book of general Botany.

Drury: Useful plants of India.

Bacteria in daily life.

*Paper III.—Household Zoology.*

- I. Cell as unit of structure and function in a living organism. Mitotic cell division.



Different kinds of tissues and histology of chief organs. Spermatogenesis. Oogenesis and fertilisation. Evolution and heredity—practical application of genetics.

- II. Parasitology—Common parasitic diseases in man due to parasitic protozoa, platyhelminthes and nemathelminthes. Amœbic dysentery, Malaria, Kala-azar, Tropical ulcer, Syphilis, Yaws. Outline of the life history of *Farciola Lepatica*. *Teania*, *Ascaris*, *Enterobius* and *Ancylostoma*.
- III. Insects of economic importance—Classification—Beneficial, harmful and useful—life histories of Mosquito and House-fly.
- IV. Dairying—Production of clear and safe Milk testing. Milk products.
- V. Poultry raising—Bee raising. Care of poultry. Value of poultry products in diet, etc.

### *Practical*...

Preparation of blood film. Mounting of wings, legs and proboscis of House-fly and Mosquito.

Candidates should be in a position to identify and describe the specimens studied. They will be required to submit their note-books containing a record of their practical work.

### *Books for reference:*

B. M. Das Gupta: Introduction to Medical Parasitology.

A. C. Chandler: Introduction to Parasitology.



Walter: Genetics.

G. W. Herrick: Insects injurious to the Household  
and annoying to Man.

Schafer: Essentials of Histology.

Shull: Evolution.

Shull: Heredity.

NOTE:—Botany and Zoology are taught in alternate years, to the combined First and Second year classes.

The Practical Examination at the end of the First Year will cover Physics, and either Botany or Zoology—whichever is taught that year. The Practical Examination at the end of the Second Year will cover Botany and Zoology only.

*D.—General English*—Same as Paper I and II of English (General Section) as detailed in the course of study for the B.A. Pass examination.

## PHYSIOLOGY.

### B.Sc. Pass.

Same course of study as is prescribed under Physiology for the First Professional Examination of the degree of M.B.B.S., in the Faculty of Medicine.

## GEOGRAPHY.

(See Faculty of Arts).



## CHAPTER XI.

## THE EXAMINATIONS—FACULTY OF MEDICINE.

## I—Pre-Medical Test\*

*A—ORDINANCES AND REGULATIONS*

1. There shall be a Pre-Medical examination for admission to the courses of study for the M.B. Ordinances. B.S., in the Faculty of Medicine, and it shall be held at Lucknow once a year.

2. No candidate shall be admitted to this examination unless he has passed either—

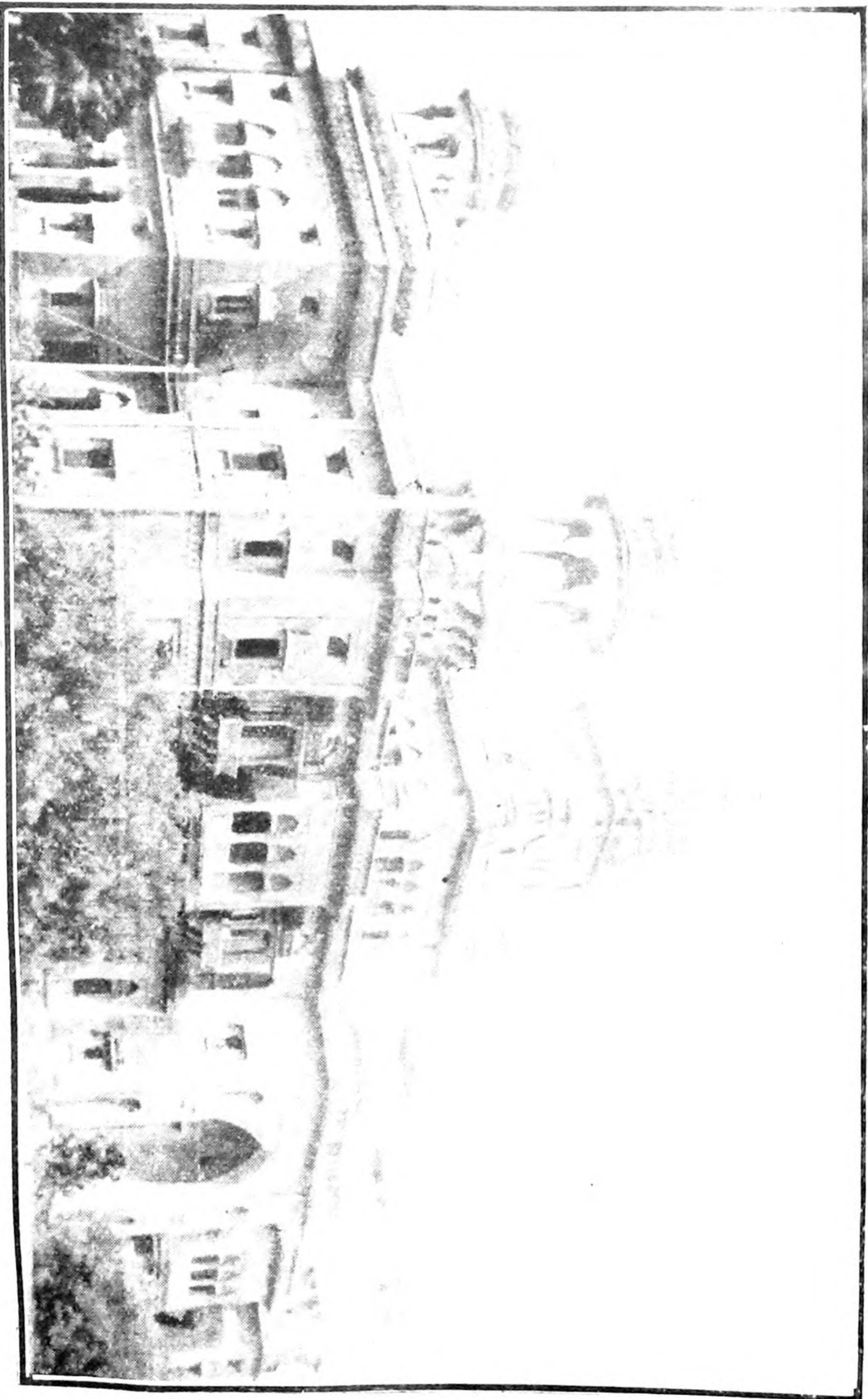
- (i) the B.Sc. Examination of an Indian University† incorporated by any law for the time being in force with Chemistry and Biology; or
- (ii) having passed the B.Sc. examination, has passed at one time or other, in that examination combined with the Intermediate Examination leading thereto, in the three subjects—Chemistry, Physics and Biology; or
- (iii) the Intermediate Examination of the Board of High School and Intermediate Education, U. P., or Rajputana (including Ajmer-Merwara), Central India and Gwalior, or the Intermediate Examination of an Indian University incorporated by any law for the time being in force, with Chemistry (including Organic Chemistry), Physics and Biology, in such courses of study as

\*The Pre-Medical Test will ordinarily be held in the month of June every year.

†For list of approved Universities, see Chapter VII.



MAIN BUILDING, KING EDWARD'S MEDICAL COLLEGE, LUCKNOW UNIVERSITY.









may be recognized for the purpose from time to time by the Faculty of Medicine.\*

\*The following courses of study have been recognized:—

1. *Aligarh Muslim University.*

The courses of study in Physics, Chemistry and Biology for the Intermediate Examination.

2. *Banaras Hindu University.*

The courses of study in Physics, Chemistry and Biology for the Intermediate Examination.

3. *Board of High School and Intermediate Education, U. P.*

The courses of study in Physics, Chemistry and Biology for the Intermediate Examination of 1952.

4. *Board of High School and Intermediate Education, Rajputana and Ajmer-Merwara), Central India and Gwalior.*

The courses of study in Physics, Chemistry and Biology for the Intermediate Examination upto 1948.

5. *Rajputana University.*

The Intermediate Examination in Science, with Physics, Chemistry and Biology after 1948.

6. *Punjab University.*

The Intermediate Examination in Science (Medical Group).

7. *East Punjab University.*

The Intermediate Examination in Science (Medical Group).

8. *Delhi University.*

The courses of study in Chemistry (including Organic Chemistry), Physics and Biology for the Intermediate Examination in Science for years 1941-44 or the Pre-Medical Examination of Delhi University after 1944.

9. *Nagpur University.*

The Intermediate Examination in Science (Biology).

10. *Saugor University.*

The Intermediate Examination in Science (Biology).

11. *Bombay University.*

The Intermediate Examination in Science (Biology).

12. *Patna University.*

The Intermediate Examination in Science (Biology).—(for 1951 only)

(Continued on the next page.)



Provided that he has attained the age of 17 years or will attain that age by November 30 of the year of admission.

3. Every candidate appearing at the examination shall be required to appear in the following subjects:—

(1) Chemistry, including Organic Chemistry, (2) Physics, (3) Zoology, (4) Botany.

The candidates should read the following books for this examination in addition to the text-books in the above subjects that they have been previously educated in:—

(1) Woodgor: Elementary Morphology and Physiology for Medical Students.

(2) Luff and Candy: Manual of Chemistry, Vol. II. Organic.

(3) Deodhar: A Text-Book of Physics.

4. The examination shall be a competitive\* one for

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13. The Examination conducted by the Board of Secondary Education, United States of Madhya Bharat.

14. The courses of study of Intermediate Examination of the Universities of the Provinces and Indian States, etc., which have no Medical College of their own, and whose claim to admission is recognized on certain conditions by the University, should as far as possible correspond with the courses of study of the Intermediate Examination of the Board of High School and Intermediate Education, U. P.

15. The Final examination leading to the Licence of the State Medical Faculty, U. P., as equivalent to the Intermediate Examination of an Indian University for purpose of admission of Licenciates of the U. P. State Medical Faculty to the courses of study for the M.B.B.S. Degree of the Lucknow University.

\*If in the open competition twenty-five women candidates do not come within the prescribed number, then the required number of women candidates shall be admitted in order of merit among themselves to make up the total of twenty-five women candidates for admission.

*(Continued on the next page)*



the purpose of filling up the declared number of vacancies  
(1) for *bona fide* residents\* of the Uttar Pradesh and  
(2) residents of other Provinces and Indian States which

\*A *bona fide* resident of the Uttar Pradesh is :—

- (a) a citizen of India, the domicile of origin of whose father is in the Uttar Pradesh and who himself is domiciled in the Uttar Pradesh ; or
- (b) a citizen of India, the domicile of origin of whose father was not in the Uttar Pradesh, but, who or whose father has acquired a domicile in the Uttar Pradesh, provided that the candidate himself has, after such acquisition, resided in the Uttar Pradesh for not less than five years at the date on which he applies ; or
- (c) a citizen of India, who was born in the Uttar Pradesh and whose father is (or, if dead, was at the time of his death) employed in any department of the Central Government and is, or was, liable to inter-provincial transfers, provided that he has himself resided in the Uttar Pradesh for three continuous years immediately preceding the date of application ; or
- (d) a student of Indian origin from abroad whose ancestors were domiciled in the Uttar Pradesh ; or
- (e) (i) a citizen of India, and  
(ii) a person who has migrated or may hereafter migrate from Pakistan to reside permanently in this State  
in whose favour a declaration of eligibility has, except as hereinafter provided, been issued by the Governor of the Uttar Pradesh.

A declaration of eligibility as required by clause (e) above will be given by the Governor after considering each case on merit ; provided that no declaration of eligibility will be required in the case of persons who migrated from Pakistan to reside permanently in this State on or after July 19, 1948, but *before* September 30, 1948.

*N B.*—Wards of the employees of the Central Government serving in U. P. (whether in Civil or Military employ) can be permitted to appear in the Pre-Medical Test provided they possess the requisite qualifications. The conditions of residence in the U. P. mentioned above will not apply in their cases.

The above concession shall be available only to those candidates whose guardians are posted in Uttar Pradesh at the time of making applications for permission to appear at the Pre-Medical Test. If the

(Continued on the next page.)



have no Medical College of their own and whose claim to admission has been recognized by the Executive Council on certain conditions\*

5. Selected candidates shall be required to undergo a health examination by a Medical Board appointed

guardian is not the father, mother or real brother of the candidate, he will have to satisfy the Registrar that the candidate has really been dependant on him/her for at least two years immediately preceding the candidate's admission.

NOTE I.—Two seats have been reserved for students of the Delhi Province (*vide* Executive Council Resolution No. 34 dated July 16, 1948), on the following conditions:—

- (1) That the candidates must secure a position within the sanctioned limit of number.
- (2) That the Government of India should previously agree to pay a capitation fee of Rs. 2,000 per annum per candidate in addition to the usual Tuition fee, etc., to meet the cost of medical education.

II.—Two seats have been reserved, for a period of five years, from the Session 1950-51 for candidates belonging to the scheduled castes—vacancies to be filled up by selecting two candidates who get the highest number of marks among the scheduled caste candidates at the Pre-Medical Test, provided that no such candidate comes out successful in the prescribed general list (*vide* Executive Council Resolution No. 42 dated July 20, 1949).

III.—As a temporary measure, two seats have been reserved for students deputed by Jammu and Kashmir Government, provided they possess the requisite qualifications for admission and the Jammu and Kashmir Government pays the capitation fee (*vide* Executive Council Resolution No. 12 dated May 10, 1951).

\*The conditions are—

(1) The candidate must secure a position within the sanctioned limit of number.

(2) The Provincial Government or Indian State concerned should previously agree to pay the requisite amount per student to meet the cost of medical education.

NOTE.—(i) No capitation fee shall be charged from students of the Rampur State (*vide* Executive Council Resolution No. 15, dated December 24, 1948.)

(Continued on the next page.)



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by the University and their admission to the Faculty shall be subject to their physical fitness.

The health examination shall include an X-ray examination of lungs for which a fee of Rs. 3 shall be charged.

*B.—SCHEME OF EXAMINATION.*

The examination shall be conducted by means of one paper of three hours' duration in each subject and shall carry 100 marks in each paper.

Regulation.

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(ii) On the basis of reciprocity no capitation fee will be charged from students who are residents of Provinces other than United Provinces if they admit students from these Provinces to their Medical Colleges without charging any capitation fees—*vide* Executive Council Resolution No. 14, dated January 14, 1949.



### C.—COURSES OF STUDY.

I. 1. *Chemistry*—Elements and compounds—acids, bases and salts—oxidation and reduction—combustion flame, Laws of Boyle, Charles, Gay—Lussac, Avogadro—Atomic Theory—Equivalent, molecular, and atomic weights, valency—Simple chemical calculations involving weight of material, and volumes, and gases—elementary chemistry of the fluorina, commoner elements including hydrogen, oxygen, nitrogen, carbon, sulphur, Phosphorus, silicon, boron, chlorine, bromine, iodine, sodium, potassium, calcium, barium, magnesium, aluminium, arsenic, antimony, bismuth, silver, copper, lead, zinc, mercury, manganese and iron.

2. Properties of solutions, osmotic pressure, molecular weights, electrolytic dissociation, colloids.

3. *Organic Chemistry*.—The paraffins and their principal derivatives with special reference to methane and ethane, fermentation. The alcohols-aldehydes and acetones, fatty acids glycerol; fats, saponification; carbohydrates, urea; chemical nature of the proteins; Benzene and its principal derivatives, pyridine.

II.—1. *Physics*.—Properties of matter, units measuring instruments, work and energy, specific gravity, study of fluids, elasticity, kinetic theory of matter, surface tension, diffusion, osmosis, viscosity.

2. *Heat*.—Thermometry, Calorimetry and specific heat, expansion of solids, liquids and gases, change of state, melting point, boiling point, latent heat of fusion and vaporisation, vapour pressure, hygrometry, mechanical equivalent of heat, propagation of heat, convection, conduction, radiation.



3. *Sound*—Nature and speed, loudness, pitch, quality, reflection, interference.

4. *Light*.—Rectilinear propagation, photo-metry, reflection, refraction, lenses, mirrors, prisms, dispersion, phosphorescence, fluorescence, optical instruments, polarisation and applications, spectrum analysis and colour.

5. *Electricity and Magnetism*.—Magnetism (general) electrostatics, electric field lines of force, electrosopes, electrometers, potential capacity, energy, dielectric constant, electric currents, cells, types, series and parallel, general effects produced by current, galvanometers, resistance, electromotive force, Ohm's law, Joule's law and their applications, electromagnetic induction, induction coil, thermo-electricity, Cathode rays.

III--1. *Elementary Zoology*.—An elementary knowledge of:—

The Protozoa, Coelenterata, Annelida, Arthropoda, and Mollusca. The life history of Protozoa associated with disease in man including entamœba, trypanosomes, malarial parasites, mosquitos and other important blood sucking Arthropoda. The more common flat worms and round worms parasitic in man.

2. A general knowledge of the structure of the Vertebrata. The fundamental facts as to (1) structure, etc., of the cell, (2) sexual reproduction, (3) hereditary and variation, (4) maturation, fertilisation and segmentation of the Ovum, (5) the early development of Amphibians and the foetal appendages of birds and mammals.

IV.—*Elementary Botany*.—The characteristic features of the following groups and classes of the vegetable kingdom:—

Thallophyta, bryophyta, pteridophyta, Spermatophyta. The fundamental facts and principles of organography and Physiology.



## I.—Bachelor of Medicine and Bachelor of Surgery.

### A—ORDINANCES AND REGULATIONS.

1. Except as hereinafter provided, no candidate shall be admitted to either or both of the degrees of Bachelor of Medicine and Bachelor of Surgery unless he shall have attended the prescribed courses of study extending over a period of not less than five academic years, after passing the Pre-Medical Test, in the last three of which clinical subjects should be studied.

The work in the fifth year may consist of clinical work including clinical lectures only. The necessary attendance must be put in at the University hospital or such other hospital or institution as may be recognised by the University.

No candidate shall be admitted to a course of study in the Faculty of Medicine unless he has passed the Pre-Medical examination of this University.

3. The First Professional Examination shall be in the subject of Anatomy and Physiology.

Candidates before presenting themselves for this examination shall produce evidence of—

(1) having completed the second year of medical study;

(2) having attended complete courses of instruction approved by the University in Anatomy and Physiology;

(3) having dissected the human body at least once.



Candidates who fail in one subject only securing not less than 33 per cent marks shall be eligible to re-appear at a supplementary First M. B. B. S. Examination to be held in the last week of July, only in the subject in which they fail at the April examination. But if they fail in both the subjects or in one subject obtaining less than 33 per cent of marks, they shall be declared to have failed and shall have to appear in both subjects at any subsequent examination. Students who fail to pass at the Compartmental examination in July shall have to appear in both subjects at any subsequent examination.

Candidates who fail to appear in or to pass the First Professional Examination in five successive opportunities shall not be allowed to continue their studies except with special permission of the Faculty.

Candidates who fail to satisfy the examiners must before re-admission to the examination, produce evidence of having pursued such further courses of study as they may be required to do by the Dean of the Faculty, in consultation with the Head of the Department concerned.

4. The Final Professional Examination shall consist of two Parts, *viz*:—

(A) Part I—Pharmacology\* including Pharmacy, Materia Medica, and Pharmacological Therapeutics, Pathology and Bacteriology;

Forsenic Medicine, Toxicology in their Medico-legal aspect.

Public Health (State Medicine).

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\*Candidates who have passed in Materia Medica under the old Ordinances are not required to pass in Pharmacology under the new Ordinances (*vide* Resolution No. 16 of the Executive Council, dated October 10, 1930),



Candidates before appearing for this examination must produce evidence (a) of having passed the First M.B. B.S. Examination, (b) of having devoted, during the period of two years subsequent to their passing the First M.B. B.S. Examination, a part of their time in clinical study, and (c) of having completed their third and fourth years of study.

An examination in Part I shall be held at the end of the fourth year of the students' medical course.

(B) Part II—

Medicine, including Therapeutics, Medical Pathology, and Mental Diseases.

Surgery, including Surgical Anatomy and Surgical Pathology; Ophthalmology; and

Obstetrics and Gynæcology.

\*(a) Candidates before appearing for this examination must produce evidence of having passed the Final M.B. B.S. Part I Examination and of having completed their fifth year of study;

(b) of having undergone a course of instruction in Mental Diseases;

(c) of having received a course of instruction in the University in the following subjects:—

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\*It is necessary for candidates, who appear in Final M.B.B. S. Part II Examination to have attained 21st year of age (*vide* Executive Council Resolution No. 5, dated July 21, 1939).



## I.—(i) Clinical Medicine.

(ii) Tuberculosis.

(iii) Infectious Diseases.

(iv) Diseases of Children.

(v) Diseases of the Skin.

(vi) Medical Radiology and Medical Electro-therapy

(vii) Medical Ethics.

## II.—(i) Clinical Surgery.

(ii) Operative Surgery and Surgical Anatomy.

(iii) Diseases of Ear, Nose and Throat.

(iv) Venereal Diseases.

(v) Orthopædics.

(vi) Dental Diseases.

(vii) Anesthetics.

(viii) Surgical Radiology and Surgical Electro-therapy.

## (d) of having—

(i) attended as a clinical clerk in the Medical wards for six months,

(ii) attended as a surgical dresser in Surgical wards for six months,

(iii) attended as a clinical clerk in the Obstetric and Gynæcological wards for three months,

(iv) attended as a clinical clerk in the Ophthalmic wards for three months,

(v) attended the Medical Out-patients Section and the Surgical Out-patients Section for separate periods of three months each,

(vi) attended post-mortem clinics for two years,

(vii) acquired proficiency in vaccination,



(viii) complied with the requirements of the Medical Council of India in Obstetrics\* and Gynaecology.

5. Notwithstanding anything to the contrary in Ordinances 1 to 4, a Licentiate of the State Medical

*\*Note.*—Midwifery, Diseases of Women and Infant Hygiene, including:—

- (a) Courses of systematic instruction in the principles and practice of Midwifery, Gynaecology and Infant Hygiene, including Applied Anatomy and Physiology of Pregnancy and Labour.
- (b) Lectures and demonstrations in Clinical Midwifery, Gynaecology and Infant Hygiene and attendance on the practice at a Maternity Hospital or the Maternity wards of a General Hospital, including (i) ante-natal care, and (ii) the management of the puerperium, and on in-patient and out-patient gynaecological practice for a period of at least three months.

This period should be devoted exclusively to instruction in these subjects, and should be subsequent to the Medical clinical clerkship and the Surgical dressership. Not less than two-thirds of the hours of clinical instruction should be given to Midwifery, including ante-natal care and Infant Hygiene.

- (c) Of this period of clinical instruction not less than one month should be spent as a resident pupil either in a Maternity Hospital, or in a hostel attached to a Maternity Hospital or to the Maternity wards of a General Hospital.

The students should during this month attend at least twenty cases of labour under adequate supervision.

A certificate showing the number of cases of labour attended by the student in the Maternity Hospital and in the patients' homes respectively should be signed by a responsible medical officer on the staff of the hospital and should state—

- (i) That the student has personally attended each case during the course of labour, making the necessary abdominal and other examinations under the supervision of the certifying officer who should describe his official position.
- (ii) That satisfactory written histories of the cases attended, including, when possible, ante-natal and post-natal observations, were presented by the student and initialled by the supervising officer.



Faculty, who satisfies the conditions for entering the Pre-Medical Test or the King George's Medical College, except the minimum educational qualification of having passed the Intermediate examination in Science in the case of Licentiates who have undergone training for four years, may be admitted in August and may take the necessary examinations in the following order:—

Final M.B.B.S. Part I (Pathology, Hygiene and Medical Jurisprudence) may be first taken at the April examination of his first session or at any subsequent examination.

Final M.B.B.S. Part II (Medicine, Surgery, Ophthalmology and Obstetrics and Gynæcology) can be taken only after Final M.B.B.S. Part I has been passed and may be first taken at the April examination of his second session or at any subsequent examination.

The courses of instruction for each examination shall be prescribed by the Dean after consultation with the respective Heads of Departments.

The fees charged shall be in all classes the same as those charged from regular students.

Licentiates who fail partly or wholly in an examination shall be governed by the same rules as those for regular students.

\*6 (a) Before any re-examination all candidates shall undergo such courses of further study as may be prescribed by the Dean, in consultation with the Heads of the Departments concerned.

(b) any candidate who has been admitted to Part I or Part II of the Final Examination and has failed, but

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\*Candidates who have already appeared in the Final M.B.B.S. Part II Examination *from and after* the examination of October, 1936 are eligible in the terms of this Ordinance.



yet has passed in one or more subjects need not re-appear within a period of nineteen months in those subjects which he has already passed, provided he has secured not less than 33 per cent marks in each of the remaining subjects. If the candidate fails to appear at any subsequent examination, or on re-examination, as permitted by this rule, fails to secure the prescribed minimum pass marks, within nineteen months in the remaining subjects, he shall be required to re-appear in all subjects, at any subsequent examination.

(c) All candidates who obtain less than 33 per cent of marks in one or more subjects shall re-appear in all subjects at the next examination.

(d) Candidates unable to appear in one or more subjects owing to illness will be treated in respect of those subjects as candidates who had failed therein, but obtained more than 33 per cent of marks. No concession will be given to a student for such illness unless he is treated for the same in a ward of Gandhi Memorial and Associated Hospitals and is certified by the Physician or Surgeon by whom he is being treated that he is unfit to appear at the examination in those subjects. The Vice-Chancellor, on the recommendation of the Heads of Departments concerned and of the Dean, may extend, if necessary, the period of credit under clause (b) for subjects in which the sick student has already passed, provided he has passed in not less than three of them.

(e) Candidates failing in all subjects will not be entitled to any of the foregoing concessions.

7. The Professional examinations will be held twice a year ordinarily in April and October.

Prizes and scholarships shall be awarded on the results of the April examination only except for the purpose of the Eduljee Hormusha Parakh Gold Medal.



Distinction and Honours shall be awarded only to those students, who appear for the first time.

Transitory Ordinance. Notwithstanding anything to the contrary in the Ordinances, not more than 50 Licentiates with approved War Service, or refugees from West Pakistan, who are *bona fide* residents of U. P. or are *bona fide* refugees registered in U. P. may be admitted on the recommendation of the Director of Medical and Health Services, in August to the courses of study for the M.B. B.S. degree in the Faculty of Medicine, provided the extra cost of training of these Licentiates is borne by the Provincial Government. Such Licentiates may take the necessary examinations in the following order:—

Final M.B.B.S. Part I (Pathology, Hygiene and Medical Jurisprudence) may be first taken at the April examination of his first session or at any subsequent examination.

Final M.B.B.S. Part II (Medicine, Surgery, Ophthalmology and Obstetrics and Gynæcology) can be taken only after Final M.B.B.S. Part I has been passed and may be first taken at the April examination of his second session or at any subsequent examination.

The courses of instruction for each examination shall be prescribed by the Dean after consultation with the respective Heads of Departments.

The fees charged shall be in all classes the same as those charged from regular students.

### General.

- Regulations. 1. Before attending any class, students must obtain an Admission Form from the Dean which they must at once present to the Registrar, paying at the same time any fee which may be due.



Until this is done no credit will be given for attendance upon any course.

2. The class and the University examinations must be taken during the year and in the order specified in the curriculum unless a student obtains written permission from the Dean to vary the order of studies. In no case will the student be permitted to enter upon hospital study until the First Professional Examination shall have been passed.

3. The following factors will be taken into consideration in determining the class work in each subject:—

- (i) Regularity in attendance;
- (ii) Periodical exercises and class examinations; and
- (iii) Laboratory note-books during the prescribed course.

4. Class examinations will be held at the discretion of the Head of the Department concerned but at least once during the session in all the subjects of the First Professional Examination, and once during the whole course of lectures in the subjects for the Final Professional Examination.

Attendance at these examinations is compulsory, but the Dean may, in exceptional cases, exempt students from these class examinations for special reasons, with or without imposing a condition of subsequent examination.

5. (a) Students are required to make reasonable preparation for class examinations and, if they fail to do so, may be fined. When an examiner finds that any student has not been able to secure at least 20 per cent



marks he shall report the case to the Dean, who will call for an explanation and if he, in consultation with the Head of the Department, considers that the explanation is not satisfactory, he may fine the student up to Rs. 5.

(b) Any student who fails to attend a class examination and is not on leave or ill in the wards will be fined Rs. 5 for the absence.

6. The Dean may, at any stage, in consultation with the Head of the Department concerned, debar a student from taking further courses of study if his class work proves so unsatisfactory as to make it clear that he is not likely to profit by them. This applies specially to the first year class.

7. Students who fail to attend the prescribed lectures and to perform the prescribed exercises or to attend the class examinations will not be admitted to the University examinations.

8. A class Schedule Card will be maintained for each student for the different examinations. The Dean will obtain the signature of the student's teachers at the end of each course of lectures or practical instruction and will send the Card to each Head of Department for final completion before the commencement of each examination. This Card must contain a statement that the student has attended not less than three-fourths of the lectures and practical classes and not less than 85 per cent of clinical instruction of which the course consists, together with such class examinations or exercises as each teacher may prescribe in connection with his own course. This Card will be submitted to the examiners at the University examination, as required. These Cards will finally be deposited in the Dean's Office for record. After a lapse of 10 years from the date of graduation they may be destroyed.



9. (a) Ordinarily no extra lectures, demonstrations, practicals or clinicals, shall be given to students whose percentage of attendance falls short of the required number.

(b) If a student has not attended the full 75 per cent of lectures, demonstrations, practicals and the 85 per cent of clinicals required in any subject, but falls short of the percentage by a number of lectures, demonstrations, practicals or clinicals not more than six, he may be allowed to make good his deficiency in a subsequent term by attendance on the number of lectures, demonstrations, practicals or clinicals deficient in that subject, provided the attendances are on consecutive classes.

(c) If, however, the deficiency amounts to more than a total of six lectures, demonstrations, practicals or clinicals, the students must attend 75 per cent of all lectures, demonstrations, practicals and 85 per cent of clinicals in that subject delivered during a subsequent term; and if that additional number be insufficient to make good his original deficiency he must continue such attendance to the end of the session.

(d) Shortage in Hospital clinical instruction ordinarily may be completed in the period assigned for "Optional Cliniques." If the deficiency cannot be completed in that period, the student should make good his original deficiency in a subsequent term or session.

### Examinations.

1. In the question-papers there will be no optional questions. An average of at least half an hour should be allowed for a candidate to answer each question.

2. In every subject there shall be an external examiner and one or more internal examiners. External



examiners should be appointed or re-elected for at least three consecutive years as far as possible.

In all clinical examinations, the examiners will observe the candidate make his examination of the patient, or the candidate will be made to demonstrate his method to them.

In the several class and University examinations, the examiners, in assessing marks, are empowered to take into account the duly attested records of work done by the candidate throughout his course of study in the subject of the examination.

3. In those subjects for which there is only one question-paper, the paper should be divided into two parts, each containing three questions. Three questions should be set by the internal examiner and three questions should be set by the external examiner. Each part should be answered in separate answer books.

In all written examinations, questions in each subject should have the approval of both the external and internal examiners appointed for that part of the subject.

Compensation in respect of marks as between the four different portions of the Final Examination, *viz.* Medicine, Surgery, Ophthalmology, Midwifery will not be given.

4. The Final Examination in Part II should include Clinical and Practical examinations in Obstetrics and Gynæcology.

5. In the appropriate papers and practical examinations of the Final M. B. B. S. Part II, as well as in class examination, questions in diseases of the Ear, Nose and Throat, Teeth or Skin, in diseases of Children and Infants, on X-ray interpretation and on Electro-therapeutics, on Venereal diseases and Tuberculosis, on



Anæsthetics and on the special instruments a technique employed in these special subjects, may be asked.

6. As far as possible in the Final examinations in Medicine, Obstetrics and Gynæcology, Ophthalmology and General Surgery, prevention of disease shall form part of the examination.

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**\*Scheme regarding compulsory Internship of candidates to M. B. B. S. Degree.**

1. The degree will only be conferred after the successful completion of internship.

II. The internship will be for a period of one year and will consist of :—

3 months in Surgical.

3 months in Medical.

3 months in Rural Areas.

6 weeks in Ophthalmology, and

6 weeks in Obstetrics and Gynæcology.

III. The candidates will be paid a salary of Rs. 100 p. m. with free lodging during internship.

IV. The candidates will be attached to the rural areas for training and service under the District Medical Officers of Health.



*\*B.—SCHEME OF EXAMINATIONS.*

## Degree of M.B. B.S — Order of Examinations.

## First Professional Examination.

<i>Subject.</i>	<i>Written.</i>	<i>Marks</i>	<i>Oral and Practical.</i>	<i>Pass Marks.</i>	<i>Dis- tinc- tion.</i>
Anatomy.	2 papers, three hours each.	150	150	Written 50%	75%
Five questions in each paper, all to be attempt- ed.					
Terminal exam- inations.		150		Oral and Practical 50%	
Day-to-Day examinations.			150		
Physiology.	2 papers, three hours each.	150	150		
Five questions in each paper, all to be attempted.					
Terminal exam- inations.		150	150		
Day-to-Day examinations.			150		
				Aggregate of Written papers and Terminal examina- tions in each subject 50%	Aggregate 50%
				Aggregate of Oral and Practical and Day-to- Day exa- mination in each subject 50%	75%

If a candidate obtains an aggregate of 75 per cent in two subjects he will be declared to have passed with Honours.

\*The requirement relating to integration of marks obtained at the Day-to-Day and Terminal Examinations with the University result in various parts of the examinations for the M.B. B.S. degree shall not be applicable to the Licentiate candidates admitted to the condensed M.B B.S. course.



## Final Professional Examination, Part 1.

<i>Subject.</i>	<i>Written. Marks.</i>	<i>Prac- Marks Pass tical.</i>	<i>Dis- tinc- tion.</i>
Pharmacology, including Pharmacy, Materia Medica and Pharmacological Therapeutics.	1 paper 3 hours. 150	Oral and Practical. 150	Written 50%
Six questions, all to be attempted.			Oral and Practical 50%
Terminal examinations.	150		
Day-to-Day examinations.		150	
			Aggregate of Written papers and Terminal examinations 50%
			Aggregate of Oral & Practical and Day-to-Day examinations. 50%
			Aggregate 50%
			75%
Pathology.	2 papers 3 hours each. 150	Practical and Oral 150	Written 50%
Five questions in each paper, all to be attempted.		Pathology and Bacteriology 6 hours.	Oral and Practical 50%
Terminal examinations.	150		
Day-to-Day examinations.		150	
			Aggregate of Written papers and Terminal examinations 50%
			Aggregate of Oral and Practical and Day-to-Day examinations 50%
			Aggregate 50%
			75%



<i>Subject.</i>	<i>Written Marks.</i>	<i>Practi- cal.</i>	<i>Marks.</i>	<i>Pass.</i>	<i>Dis- tinc- tion.</i>
Forensic Medicine, Toxicology and Mental Diseases.	1 paper 3 hours	150	Oral. 150	Written 50%	75%
Six questions, all to be attemp- ted.				Oral 50%	
Terminal examinations.		150			
Day-to-Day examinations.			150		
					Aggregate 50%
Hygiene.	1 paper 3 hours.	150	Oral. 150	Written 50%	75%
Six questions, all to be attemp- ted.				Oral 50%	
Terminal exa- minations.		150			
Day-to-Day examinations.			150		
					Aggregate 50%

### Final Professional Examination, Part II.

1. *Medicine*—1 paper, including Medical Anatomy and Medical Pathology and Therapeutics—3 hours—Five questions, all to be attempted.  
1 paper, including Therapeutic and Tropical Diseases—3 hours—Five questions all to be attempted.



*Viva Voce*—10 minutes.

*Prescription Writing*—10 minutes.

*Practical and Clinical Examination.*

*Practical Examination.*—Including the examination of the secretions and urine, pathological specimens and clinical microscopy.

*Clinical Examination.*—One medical case for which at least one hour will be allowed to the candidate for his examination and report exclusive of the time devoted to the interrogation of the candidate by the examiners.

Brief clinical examination of other medical cases which may include diseases of children.

	Marks.			
100—Papers	50 each	Pass 50%	Aggregate 50%	Aggregate 50% Distinction 75%
Terminal examinations.	150			
100—Clinical.	40—long cases 60—short cases	Pass 50%		
100— Practical and Oral	30 Oral	Pass 50%	Aggregate 50%	
	20 Specimens and Slides.			
	20 Instruments and Skiagrams.			
	30 Prescription Writing and <i>Viva Voce</i> examination.			
Day-to-Day examinations.	150			



2. *Surgery*—1 paper, including Surgical Anatomy, 3 hours. Five questions, all to be attempted.
- 1 paper, including Surgical Pathology, 3 hours. do.

*Viva Voce*—10 minutes.

*Practical and Clinical Examination.*

Surgical Anatomy and Instruments—15 minutes.

Operative Surgery—Two operations on the cadaver.

Clinical Examination.—One Surgical case for which at least one hour will be allowed to the candidate for his examination and report exclusive of the time devoted to the interrogation of the candidate by the examiners.

Brief clinical examination of other surgical cases which may include diseases of children.

100—Papers.	Marks. 50 each	Pass 50%	} Aggregate 50%	} Aggregate 50% Distinction 75%	
Terminal examinations.	150				
100—Clinical.	40—long cases. 60 - short cases.	} Pass 50%	} Aggregate 50%		
	30 Oral 20 Specimens 30 Operative. Surgery				
100—Practical and Oral	20 Instruments and Skiagrams	Pass 50%	Aggregate 50%		
Day-to-Day examinations,	150				



3. *Ophthalmology*.—1 paper—3 hours—six questions—all to be attempted.

Practical and Clinical Examination, including pathological specimens and long and short cases.

*Marks.*

100—Paper	50 each part	Pass 50%	} Aggregate 50%	} Aggregate 50% Distinction 75%
Terminal examinations.	150			
100—Oral and Practical.	....	Pass 50%	} Aggregate 50%	
Day-to-Day examinations.	150			
100—Clinical.	} 40—long cases } 60—short cases	} Pass 50%	}	

4. *Obstetrics and Gynæcology*.—1 paper—six questions including both subjects—all to be attempted—3 hours.

*Viva Voce*—10 minutes, including instruments and assessment of student's records of Obstetric cases and his knowledge in Infant Hygiene.

*Practical and Clinical Examination.*

*Practical Examination*—Pathological specimens, etc.

*Clinical Examination*—Of Patients in Hospital wards.



*Marks.*

100—Paper	50 each part	Pass 50%	} Aggregate 50%	} Aggregate 50% Distinction 75%
Terminal examinations.	150			
100—Clinical	{ Obstetric cases 60 Gynæcological cases 40 }	Pass 50%		
100—Oral and Practical.	....	Pass 50%	} Aggregate 50%	
Day-to-Day examinations.	150			

*General:*

If a candidate obtain an aggregate of 75 per cent in four subjects, including Medicine or Surgery and Pathology, he will be declared to have passed the Final examination with Honours.

A candidate may, at the discretion of the examiners, be prevented from attending the Clinical part of the examination in the subject in which he has failed to satisfy examiners.

Only those candidates will be considered qualified for Honours or Distinction who passed the Degree examination in the first attempt in each Part.



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### C.—COURSES OF STUDY.

#### The First Professional Examination.

The teaching of Anatomy and Physiology should include as a regular part of the courses, the demonstration on the living human body of structure and functions, including the information to be obtained from Radiology.

#### Anatomy.

1. Human Anatomy and Embryology with special reference to their application in Medicine and Surgery.

2. Dissection of the whole body at least once.

#### *Books recommended:*

Cunningham: Practical Anatomy.

Cunningham: Text-Book of Anatomy.

Gray: Text-Book of Anatomy.

Siddiqi: Anatomical Atlas of Human Body.

#### *Books of reference:*

Berry: Practical Anatomy.

J. Fraser: Osteology.

J. Fraser: Embryology.

Buchanan's Anatomy, edited by J. Fraser.

#### • Physiology.

1. The Physiology of the Blood, of Circulation, Respiration, Secretion and Excretion, Digestion and Absorption, Exchange of Material and Nutrition, Production and Discharge of Heat and the Maintenance of normal Temperature in the Body.



2. The influence of the Nervous System on each of the above named functions.
3. The Elementary Physiology of Muscle and Nerve.
4. The Physiological Anatomy of the Brain and Spinal Cord and the localisation of function in these organs.
5. The Physiology of common and special Sensation and the Physiological Anatomy of the Sense Organs.
6. The Physiology of the Larynx: elementary facts relating to Voice and Speech.
7. The Physiology of the Ductless Glands.
8. The Physiological properties of Adrenaline, Atropine, Curara, Histamine, Nicotine, Pilocarpine, Strychnine, Ergotoxine and Acetylcholine.
9. Biochemistry and Biophysics.

The knowledge of Elementary Chemistry and Elementary Physics required before entrance upon the Medical curriculum paper will be supplemented before the First M.B.B.S. by further instruction and examination in these subjects adopted to the special needs of a medical student.

10. The elements of Physiology of Anæsthesia.

11. The elements of Physiological Psychology.

In the practical examination students will be required to give evidence of their knowledge:—

(i) by recognising specimens of normal tissues under the Microscope;

(ii) by making preparations of normal tissues, either fresh or previously prepared so as to demonstrate their structure.



- (iii) by performing with the aid of preparations of frog simple experiments relating to the properties of muscles, nerve and the central nervous system;
- (iv) by identifying by simple experiments substances and liquids of Physiological importance. Students may also be required to estimate quantitatively the chief constituents of Normal and Pathological Urine.

***Books recommended:***

Halliburton: Manual of Physiology.

Halliburton: Essentials of Chemical Physiology.

Schafer: Essentials of Histology.

Schafer: Essentials of Experimental Physiology.

***Books of reference:***

Burridge: Excitability—a Cardiac Study.

Burridge: A new Physiology of Sensation.

Wright: Applied Physiology.

**Final Professional Examination.**

**Pharmacology, including Pharmacy, Materia Medica and Clinical and Pharmacological Therapeutics.**

(a) Materia Medica including:—

- (i) The Physical and Chemical properties of the active principles of plants.
- (ii) Definitions of the Pharmaceutical processes and Pharmacopœial preparations.
- (iii) Posology.
- (iv) The source, character, and preparations of drugs, Pharmacopœial indigenous,



(b) Pharmacological actions of drugs (pharmacopœial and indigenous) including the following:

- (i) Chemical and Physical basis of Pharmacology.
  - (ii) Methods of administering drugs.
  - (iii) Conditions influencing drug action. Idiosyncrasy, anaphylaxis, tolerance and cumulative action.
  - (iv) Conditions influencing absorption and excretion of drugs.
  - (v) Pharmacological Therapeutics.
- (c) Clinical Therapeutics.
- (d) A course of practical instruction in the following for at least one term each:—
- (i) Pharmacy, including principles of dispensing—use of balance—incompatibilities and compounding of mixtures, emulsions, liniments, plasters, ointments, pills, powders, cachets, capsules and suppositories.
  - (ii) Experimental Pharmacology illustrating the action of drugs on blood vessels, heart, intestines, uterus, central nervous system, secretions, protozoa and ciliated epithelium.

The course to extend over three academic year, *viz.*, the second, third and fourth year of the student's curriculum. In the second year, the course shall consist of 15 introductory lectures in Pharmacology including demonstrations in *Materia Medica*. In the third year there will



be 50 lectures in Pharmacology, 16 demonstrations in Experimental Pharmacology and 16 practical classes in Pharmacy. In the fourth year there will be 35 lectures in Clinical Therapeutics.

*Books recommended:*

Clark:	Applied Pharmacology.
Cushny:	Pharmacology and Therapeutics.
Dixon:	Pharmacology.
Dixon:	Practical Pharmacology.
Gaddum:	Pharmacology.

**Hygiene.**

The Course comprises of 36 lectures and 8 demonstrations. The course of lectures will be as follows:—

*Water supply:*—Sources, impurities, purification, public water supplies, water-borne diseases.

*Wastes:*—Collection, removal and disposal of refuse, sullage and sewage; conservancy and water carriage systems; nuisance, utilization of wastes, composting, sullage and sewage farming; disposal of dead bodies.

*Dwelling and work places:*—Site, aspect, damp proofing, rat proofing; lighting of houses, residential houses, workshops, schools, hospitals, cinemas, hostels and restaurants, slaughter-houses, dairies, markets.

*Air and Ventilation:*—Vitiated air, natural and artificial ventilations. Air conditioning, comfortable environment, over-crowding, tropical climate, air-borne diseases.

*Industrial Hygiene:*—Smoke, fumes, dust, occupational hazards, Health, safety and welfare of workers.



Trade wastes and their disposal; offensive trades; noise, fatigue, rest, recreation.

*Food and Nutrition:*—Food requirements, common food products. Inspection of food stuffs, adulteration, food storage, food deficiencies and nutritional disorders. Balance diet. Nutritional Survey, food-borne diseases.

*Personal Hygiene:*—Cleanliness, clothing, sleep, rest, exercise; health habits; care of health in tropics.

*Camp and Rural Sanitation:*—Fairs, camps, medical and sanitary arrangement. Rural Sanitation.

*Preventive Medicine:*—Infection, resistance, immunity, General preventive measures, notification, isolation, disinfection, immunization.

Epidemiology and prevention of common communicable diseases of Tropics.

Special preventive measures against plague, cholera, small-pox, malaria, kala-azar, filriasis, diphtheria, tuberculosis, typhus, rabies, leprosy, venereal diseases, helminthic infections, enteric fever and dysenteries. Animal diseases transmissible to man.

*Insect-borne diseases:*—Insect control (fly, mosquito, louse, fleas, ticks and sand-fly).

*Vital statistics:*—Population, registration, birth, death; rates and average; collection, compilation and tabulation of statistical data; common statistical errors.

*Public Health measures:*—General Medical and Public Health Organization in India and provinces, maternity and child-welfare, School Health, Health Publicity, Social Medicine. Role of Medical Practitioners, clinics, dispensaries and hospitals in Public Health.

Demonstrations will be eight in number and they will be given on the usual public health measures employed in towns and villages. Some demonstrations will



be given in field work by paying visits to water works, School Clinics, Welfare Centres, Vaccination Stations, etc.

*Books recommended:*

B. N. Ghose: Hygiene and Public Health (Scientific Publishing Co., Calcutta).

J. L. Das: Hygiene and Public Health (Jahar Lal Das, 15, Chandra Mandal Lane, Kalighat, Calcutta).

J. W. Bigger: Hand Book of Hygiene (Bailliere Tindall & Co., London).

**Medical Jurisprudence, including Insanity and Toxicology.**

*Medical Jurisprudence:*

A course of 40 lectures on Medical Jurisprudence comprising chiefly the following subjects:—

Legal procedure in the Criminal Courts, Medical evidence, Identity of the living and the dead, Post-mortem examination, Exhumation, Examination of blood, seminal and other stains. Death in its medico-legal aspect. Violent asphyxial deaths from hanging, strangulation, suffocation, and drowning. Deaths from extremes of temperature, burns, scalds, electricity, and lightning. Mechanical injuries.

Subjects involving sexual relations and offences.

Insanity in its medico-legal aspect.

*Toxicology.*—Symptoms, treatment, post-mortem appearance and the detection of poisons commonly used in India.



Medical ethics and duties that devolve upon Practitioners in their relation to the State.

2. Attendance at not less than 16 medico-legal post-mortem examinations. Reports on six examinations may be called for by the Examiner.

3. One lecture to be devoted to professional privileges, responsibilities, and obligations together with the provisions of the United Provinces Medical Registration Act No. III of 1917 and the British Medical Act.

4. Three Demonstrations in the Forensic Medicine Museum.

*Books recommended:*

Sydney Smith: Forensic Medicine.

Modi: Text-book of Mental Jurisprudence and Toxicology.

Jagae Shaw: Handbook of Mental Diseases.

**Pathology.**

A course of instruction in Pathology consisting of 100 lectures (general and special). Bacteriology, Parasitology, with practical classes in Morbid Histology, Bacteriology, Parasitology, Medical Entomology and Chemical Pathology.

Each student should be required to have received practical instruction in the conduct of autopsies and to have acted as a post-mortem clerk in at least ten cases, so far as may be practicable.

The course to extend through two academic years, being the third and fourth year of the student's curriculum.

*Books recommended:*

Boyd: Text Book of Pathology.

Dible: Pathology.

Green: Pathology.



Manson: Tropical Diseases—Appendix—Medical Zoology.

De and Chatterjee: Bacteriology in relation to Clinical Medicine.

Mackey & McCartney: Hand Book of Practical Bacteriology.

Courses in Clinical Pathology and in Elementary Bacteriology and Parasitology should be commenced as soon as possible after the student has entered upon his clinical studies and completed before the student is allotted beds.

### Medicine.

Medicine, including Applied Anatomy and Physiology, Clinical Pathology and Therapeutics, comprising:—

1. A course of not less than 75 lectures in the principles and practice of Medicine and a series of not less than 40 clinical lectures.
2. The Medical practice in a recognised Hospital during three years, with clinical instructions and experience as a Medical Clinical clerk for not less than six months in the Hospital wards, including Clinical Pathological investigations on the student's own cases in the Hospital Clinical Room, and three months in the Out-Patients Department.
3. A course of not less than 20 demonstrations of Clinical Methods, Applied Medical Anatomy and Physiology, the recognition and interpretation of physical signs and the use of instruments of observation.
4. Instruction in Therapeutics and Prescribing, including Pharmacological Therapeutics. Electro-action and Radio-therapeutics, Mechano-therapeutics and vaccine and serum therapy.



## 5. A course of instruction in—

- (a) Diseases of Children—Attendance for one month (ten attendances) at the Out-Patient Department of Children.
- (b) Acute Infectious Diseases (Fevers)—A minimum of 10 attendances at the Hospital for Infectious Diseases.
- (c) Tuberculosis—Six lectures and attendance for one month (ten attendances) in the Tuberculosis Hospital.
- (d) Mental Diseases—Nine lectures and nine Clinical demonstrations in a Mental Hospital.

Sixteen demonstrations on Psychoneurosis in Gandhi Memorial and Associated Hospital.

- (e) Diseases of the Skin, including Leprosy—Six lectures and attendance for one month (ten attendances) in the Out-Patients Clinic for Skin Diseases. Two attendances at the Leprosy Hospital.
- (f) General Medical Out-door—Attendance for one month (ten attendances) in the Medical Out-door of the Hospital.
- (g) Twelve lectures or demonstrations on Medical Pathology.

- (h) Six demonstrations on Medical Instruments.

*Books recommended:*

Manson: Tropical Diseases.

Price: A Text-book of Practice of Medicine.

Hutchinson and Rainey: Clinical Methods.

Rogers and Megaw: Tropical Medicine.



Osler: Practice of Medicine.

Text-Book of Medicine (Beaumont).

### Surgery.

Surgery, including Applied Anatomy and Physiology and Clinical Pathology, comprising:—

1. A course of not less than 75 lectures on the principles and practice of Surgery and a series of not less than 40 clinical lectures.
2. The Surgical practice in a recognised Hospital during three years, with Clinical instructions and experience as a Surgical dresser for nine months of which at least six months must have been spent in the Hospital wards, including Clinical Pathological investigations on the student's own cases in the Hospital Clinical Room.
3. A course of not less than 20 demonstrations on Surgical methods including not less than 5 on Orthopædics (including Mechano-Therapeutics).
4. A course of instruction in the administration of Anæsthetics, including six lectures. The candidate must be certified to have administered Anæsthetics on at least twelve occasions under the guidance of the Anæsthetist.
5. A course of instruction in Surgical Anatomy and Physiology and in Operative Surgery with operations on the cadaver. The course will cover 30 attendances, and may commence in the first term of the fifth year. Practical Operative Surgery may also commence in the first term if bodies are available.



6. A course of instruction in:—

- (a) Surgical Pathology, twelve demonstrations.
- (b) Radiology and Electro-therapeutice—A course of six lectures and attendance in the Radiology Section for one month (ten attendances).
- (c) Diseases of the Ear, Nose and Throat including the practical use of the Otoscope, Laryngoscope, and Rhinoscope. A course of six lectures and attendances for one month (ten attendances) in the Ear, Nose and Throat Clinic.
- (d) Venereal Diseases—Six lectures and attendance for one month (ten attendances) in the Out-Patient Clinic for Venereal Diseases.
- (e) Dental Surgery—Six lectures and attendance for one month (ten attendances) in the Dental Clinic.
- (f) General Surgical Out-door attendance for one month (ten attendances) in Surgical Out-door Section of the Hospital.
- (g) Orthopædic Out-door attendance in Orthopædic Out-door Section of the Hospital.
- (h) Twelve demonstrations on Surgical Instruments.

7. Course of instruction in:—

- (a) Applied Surgical Anatomy, Physiology and Clinical Pathology.
- (b) Practical Surgery.
- (c) Orthopædics.
- (d) Surgical Diseases of Children.



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*Books recommended:*

- Grey Turner: Modern Operative Surgery.  
Romanis and Mitchiner: The Science and Practice of Surgery.  
Thomson and Miles: Manual of Surgery.  
Waring: Operative Surgery.  
Clement E. Shattock: Handbook of Surgical Diagnosis.  
Beasly and Johnston: Surgical Anatomy.  
Hamilton Baily: Physical Signs in Clinical Surgery.  
Illingworth and Dick: Text-Book of Surgical Pathology.

*Book recommended for consultation:*

- Boyd: Surgical Pathology.

**Ophthalmology.**

Ophthalmology, including Applied Anatomy, Physiology and Clinical Pathology.

1. A course of not less than 25 lectures on the principles and practice of Ophthalmology and a series of not less than 25 clinical lectures.

2. Three months Clinical work as Ophthalmic Clerk, including Clinical Pathological investigations on the student's own cases in the Hospital Clinical Room.

3. A course of 30 demonstrations in Refraction and use of Ophthalmoscope.

*Books recommended:*

- J. H. Parsons: Diseases of the Eye.  
May and Worth: Diseases of the Eye.



### Obstetrics and Gynaecology.

Obstetrics and Gynæcology, including Applied Anatomy, Physiology, Clinical Pathology and Infant Hygiene, comprising:

1. A course of 50 systematic lectures on the principles and practice of Midwifery and Gynæcology, and 20 lectures on Clinical Obstetrics and Gynæcology.
2. Attendance as a Clinical Clerk for Clinical instruction and experience in a recognised Maternity Hospital (or in the Maternity wards in a recognised General Hospital) and on the In-patient (and \*Out-patient) Gynæcological practice thereof for a period of six months (including Maternity internship).
3. During the clerking, the student shall receive practical instruction in the wards and the \*Out-patient Department in the principles of:
  - (a) Ante-natal care.
  - (b) Management of the puerperium.
  - (c) Care of the new-born infant.
4. Of this period of Clinical instruction not less than one month should be spent as a resident pupil devoted exclusively to instruction in Midwifery and in the Hygiene of Infants. The student should during this month attend at least 20 cases of labour under adequate supervision.

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\*NOTE.—The Professor will consult with the Dean after each year as to whether the time has yet come to allow students to the Out-Patient practice of Queen Mary's Hospital without detriment to the complete success of that Hospital.



Satisfactory written histories of Gynæcological cases shall be kept by students in book form duly signed by the Head of the Department.

5. The certificate granted by the Professor shall state:

(1) The number of cases the student has personally attended, making the necessary abdominal and other examinations under the supervision of the certifying officer whose position shall be stated.

(2) That five at least of the twenty cases were delivered by the student in the labour wards.

(3) That satisfactory written histories of the cases attended, including when possible, ante-natal and post-natal observations, were presented by the student and initialled by the supervising officer. Candidates may be required to produce these history-books before examiners as evidence of their diligent work.

6. A course of not less than 20 demonstrations on Practical Obstetrical and Gynæcological Instruments and Appliances.

7. A course of lectures on the Diseases of Infants.

8. Instruction in Contraceptive Methods.

*Books recommended:*

Novak: Gynæcology.

Wilfred-Shaw: Gynæcology.

Gibberd: Midwifery.

Browne: Ante-natal-Post-natal Care.



## Curriculum of the Faculty of Medicine.

### FIRST YEAR.

#### *Lectures and Demonstrations*

*Hospital*

Anatomy, 3 terms.

No Hospital work.

Physiology, 3 terms.

#### *Practical Work:*

Dissections, 3 terms.

Histology, 1 term.

Chemical Physiology, 1 term.

Experimental Physiology, 1 term.

### SECOND YEAR.

#### *Lectures and Demonstrations.*

*Hospital*

Anatomy, 3 terms.

No Hospital work.

Physiology, 3 terms.

Materia Medica, 1st term.

#### *Practical Work:*

Dissections, 3 terms.

Experimental Physiology, 1 term.

Practical Pharmacy, 1 term.

Histology, 1 term.

### First Professional Examination.

### THIRD YEAR.

Pathology and Bacteriology      Clinical Lectures—Medicine  
and Surgery.

Pharmacology in all  
3 terms.

Medicine

Surgery

Minor Surgery.



Forensic Medicine and Men- Clinical Methods.  
tal Diseases, 2 terms.

Dressing—3 months Out-door.

*Practical Work:*

Pathology and Bacteriology, Dressing—3 months In-door  
3 terms.

Medical Out-door—3 months.  
Clinical classes—Postmor-  
tems.

Experimental Pharmacology Medical In-door—3 months.  
and Pharmacy, 3 terms.

#### FOURTH YEAR.

Clinical Therapeutics—first Clinical Lectures—Medicine  
two terms. and Surgery.

Clinical classes.

Pathology and Bacteriology Medicine.

Medicine Surgery,

Surgery Gynæcology.

Forensic Medicine and Men- Clinical Clerking.  
tal Diseases, 2 terms.

Midwifery, Gynæcology.

Medical, 3 months.

Hygiene

Midwifery, 3 months.

Infants Diseases

Maternity cases.

Some lectures and demons-  
trations in Ophthalmology.

Post-mortems:

Six lectures in Pediatrics in  
the third term.

*Practical Work:*

Pathology and Bacteriology,  
3 terms.

Vaccination

Pharmacology tutorial,  
3rd term.

**Final Professional Examination, Part I.**



## FIFTH YEAR.

Mental Hospital.

Operative Surgery, 1 term,  
and Surgical Anatomy.

Clinical work in Hospital,  
Clinical Clerk in Oph-  
thalmic wards and Out-  
Patient Department, 3  
months.

Orthopædics, six lectures  
and 14 demonstrations in  
3 terms.

Fever and Tuberculosis  
Hospital.

Lectures:--Ophthalmology.

Obstetrics and Gynæcology.

Maternity cases—Clerking.

Clinical Medicine  
Clinical Surgery.

.... Administration of Anæ-  
sthetics with tutorial  
classes.

X-ray Department.

Diseases of Ear, Nose and  
Throat.

Tutorial classes on use of  
Instruments and Appli-  
ances.

Final Professional Examination, Part II,



The number of lectures in each subject should be as follows:—

<i>Subject.</i>		<i>Number of Lectures.</i>	<i>Period over which the course is to be extended.</i>
Anatomy	....	90	6 terms.
Physiology	....	90	6 „
Introductory Pharmacology and Materia Medica.		15	1 „
Pharmacology and Therapeutics.		85	5 „
Pathology and Bacteriology	....	100	6 „
Forensic Medicine	....	40	6 „
Mental Diseases	....	9	
Hygiene	....	36	3 „
Medicine	....	75	4 „
Clinical Medicine	....	40	6 „
Surgery	....	75	4 „
Clinical Surgery	....	40	6 „
Ophthalmology	....	25	6 „
Clinical Ophthalmology	....	25	3 „
Obstetrics and Gynæcology....		50	3 „
Clinical Obstetrics and Gynæcology.		20	3 „
Infants Diseases	....	6	2 „
Tuberculosis, Dentistry, Skin, Venereal Anæsthetics Orthopædics, and E. N. & T.	}	6	1 „ each



### III.—Doctor of Medicine and Master of Surgery.

#### ORDINANCES AND REGULATIONS.

1. No candidate shall be admitted to the degree of Doctor of Medicine or of Master of Surgery Ordinances, unless he has first obtained the degree of Bachelor of Medicine and Bachelor of Surgery in the University of Lucknow (or prior to April, 1922, in the University of Allahabad) or of such other approved Universities as allow candidates who have obtained the degree of Bachelor of Medicine and Bachelor of Surgery of the Lucknow University to be admitted to the degree of Doctor of Medicine or Master of Surgery of their Universities without any special restrictions, and until three academic years shall have elapsed after qualifying for such Bachelor's degree:

Provided that this period may be reduced by one year in the case of a candidate who (i) produces evidence\* that he has devoted subsequent to his graduation, at least one year in practical study or in hospital work *in the special department of the medical curriculum selected by him* or (ii) has either obtained Honours at the Final examination of this University for the degree of Bachelor of Medicine and Bachelor of Surgery, or has obtained distinction in Medicine in the case of a candidate for the

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\*Note—The following study of work shall qualify for the purpose of exception (i) of Ordinance 1 —

- (i) Lectureship of the Medical College, Lucknow and Agra.
- (ii) Gandhi Memorial Hospital, Lucknow, or Thomason Hospital, Agra, resident House appointment.
- (iii) Post-graduate course in College or Hospital as may be recommended by the Head of the Department concerned *in consultation with the Dean.*
- (iv) Research work carried out at an approved centre by an I. R. F. A. fellow.
- (v) Registrarship of the Irwin Hospital, New Delhi.



degree of M.D. or distinction in Surgery in the case of a candidate for the degree of M.S.

2. The M.D. and M.S. examinations will be held once a year ordinarily in April.

3. The M.D. and M.S. degree shall be conferred after the acceptance of a thesis and after the candidate has passed the prescribed examination in a special subject selected by him out of the ten departments, mentioned in the next Ordinance.

4. The special subjects and the departments in which the thesis may be presented at the examination taken are :

*I.—For the Degree of M.D.*

(1) Medicine, (2) Pathology, (3) Forensic Medicine, (4) State Medicine, (5) Pharmacology, (6) Physiology.

*II.—For the Degree of M.S.*

(1) Surgery, (2) Ophthalmology, (3) Obstetrics and Gynæcology, (4) Anatomy.

5. The thesis on the special subjects selected by the candidate for the M.D. or M.S. examination must be submitted before the first day of December, preceding the examination at which the applicant intends to appear.

The thesis will be submitted to three examiners each as an expert in that subject—one of them will be the Head of the Department concerned in the University of Lucknow. The examiners will report whether the thesis is accepted or not.

The thesis will only be accepted after approval by all the examiners, appointed to examine it.



6. A candidate whose thesis has been accepted but who has failed in the M.D. or M.S. examination and who wishes to appear in any subsequent examination for the degree of M.D. or M.S. will not again be required to submit a fresh thesis.

7. The examination for a candidate whose thesis is accepted shall consist of two Parts as under:—

*For the M.D. Degree.*

*Part I.*—It shall consist of three papers on the special subject other than Medicine selected by the candidate.

If the special subject is Medicine, it shall consist of three papers as follows:—

- (a) One paper on General Medicine.
- (b) One paper on Medical Pathology and Bacteriology, and
- (c) One paper on the latest advances in Medicine, together with commentaries on cases.

Provided that a candidate who has already passed the M.D. (Pathology) will be exempted from the paper on Medical Pathology and Bacteriology.

*Part II.*—It shall consist of an oral, practical and clinical examination.

➤ (a) M.D.—Medicine:—An oral, practical and clinical examination of Medicine including Medical Pathology and Bacteriology.

(b) M.D. in subjects other than Medicine:—

An oral and practical examination in the special subject selected by the candidate.



*For the M.S.*

*Part I.*—It shall consist of three papers on the special subject, other than Surgery selected by the candidate.

If the special subject is Surgery, it shall consist of *three* papers, as follows:—

- (a) One paper on General Surgery:
- (b) One paper on Surgical Pathology and Anatomy, and
- (c) One paper on the latest advances in Surgery, together with commentaries on cases.

*Part II.*—It shall consist of an oral, practical and clinical examination.

(a) M.S.—Surgery:—A clinical, oral and practical examination in Surgery and Surgical Pathology including operation on the cadaver and including also the use of special methods, such as electricity and of special instruments for diagnosis and treatment.

(b) M.S.—Ophthalmology or Obstetrics and Gynaecology.

A clinical, oral and practical examination in the special subject selected by the candidate.

(c) M.S.—Anatomy:—

An oral and practical examination in Anatomy.

8. (a) If the special subjects are Medicine and Surgery for the M.D. and M.S. examinations respectively, there shall be one internal and two external examiners each an expert in that subject. The paper in General Medicine and General Surgery shall be set by the internal examiner in Medicine and Surgery respectively. One each of the other two papers shall be set by an external examiner.



(b) If the special subjects are other than Medicine or Surgery, there shall be one internal examiner and two external examiners for the special subjects.

(c) All examiners shall be severally and jointly responsible for all parts of the examination. In pursuance of this the internal examiner in special subject shall make the necessary arrangements for the oral and the practical examination. Necessary arrangements for the clinical examination also in Medicine or Surgery shall be made by the internal examiner in that subject.

9. A medical graduate of the Lucknow University (or prior to April, 1922, of the Allahabad University) of not less than 10 years' standing may proceed to the M.D. or M.S. degree by a thesis only. Any such thesis shall embody the author's experience as a medical practitioner or as a research worker. No such thesis shall be accepted for the M.D. or M.S. degree unless the examiners declare it to be a noteworthy and valuable contribution to the advancement of Medical Science. The examiners may at their discretion, apply such further tests (practical and oral) as they deem necessary to satisfy themselves of the fitness of the candidate to proceed to the degree.

10. The result: Marks shall not ordinarily be assigned to any part of the examination but the examiners concerned shall confer after the examination is complete and shall report whether the candidate has 'passed with Honours', 'passed' or 'failed.'

### *REGULATIONS.*

1. The thesis shall be lodged in quadruplicate copies with the Dean of the Faculty. It shall be Regulations. printed or typed on one face of each page of foolscap size. When submitting the thesis the candidate shall state the department selected by him for examination, and enclose the requisite fee.



The thesis must be accompanied by a certificate from the officer under whom the research has been undertaken, to the effect that the techniques and statistics, mentioned in the thesis, were actually undertaken by the candidate himself.

2. The thesis shall embody the result of the applicant's own research or experience. The candidate shall indicate in this thesis in what respects his contribution appears to him to advance the knowledge or practice of Medicine or Surgery. Reference to the work of others shall be clearly indicated and differentiated from the candidate's personal observations. With the thesis the candidate may submit any printed contribution to the advancement of Medical or Surgical Science which he may have published.

3. The thesis, if accepted, shall become the property of the University and permission to publish the same, which will not be granted until the results are announced, shall first be obtained from the University. With the thesis a summary of not more than 1,500 words will be furnished in quadruplicate by the candidate which may be published as the University may direct in consultation with the Dean of the Medical Faculty and with the author of the thesis.

4. Two copies of each accepted thesis will be bound, one copy will be lodged in the University Library and one copy in the Library of the King George's Medical College.

(NOTE.—The Registrar shall ask the examiners to return the copies of the thesis submitted to them. One copy will be bound at the expense of the University Library.)



#### IV—Bachelor of Dental Surgery.

There shall be two courses of instruction for the Degree of Bachelor of Dental Surgery (B. D. S.)

(1) A two years' course for Medical graduates.

(2) A four years' course for under-graduate students.

(1)—The two years' course for Medical graduates.

##### *A—REGULATIONS.*

1. No candidate shall be admitted to the two years' course of study for the Degree of B. D. S. unless he possesses a qualification in Medicine and Surgery from a recognised University and has registered his qualification under a Provincial Medical Act.

2. The course of study for the Degree shall commence on July 1 and shall extend over not less than six full terms amounting to a total period of study of 21 months in lectures and laboratory work, along with Clinical and Operative work in the Dental Clinic under the supervision of the Dental Staff, during which period the student shall complete the minimum requirements laid down in the Syllabus. The full course must be completed before the candidate shall be eligible to receive the Degree.

3. The examination for the Degree shall consist of three Parts. Part I shall be held once a year in the 1st week of April subsequent to the completion of three terms of lectures and laboratory work, Part II in the second week of April of the second year and Part III in the third week of April of the second year. Part I must be completed before Part II is taken and Part II must be completed before Part III is taken.



*B.—SCHEME OF EXAMINATION.**B. D. S. PART I.*

- |  |   |                             |
|--|---|-----------------------------|
| (a) Dental Anatomy,<br>Human and Com-<br>parative Histology<br>and Embryology. | } | One paper—6 ques-<br>tions. |
|  |   | 100 marks—3 hours.          |
| (b) Prosthetic Den-<br>tistry and Dental<br>Metallurgy.                        | } | One paper—6 questions.      |
|  |   | 100 marks—3 hours.          |

A student may pass in either (a) or (b) separately—  
but must on the first occasion take both parts together.

*B. D. S. PART II.*

Prosthetics, Practical .... 100 marks—3 hours.

*B. D. S. PART III.*

- |   |   |                           |
|---|---|---------------------------|
| (a) Dental Surgery, Ortho-<br>dontia, Radiology, An-<br>æsthesia, Materia Me-<br>dica and Therapeutics,<br>Dental Hygiene and<br>Pathology. | } | One paper—6<br>questions. |
|   |   | 100 marks—3<br>hours.     |
| (b) (i) Practical Operative<br>Dental Surgery.  | } | 100 marks—3<br>hours.     |
| (ii) Clinical   |   | }                         |
| (iii) Oral  |   |                           |

Both sections (a) and (b) must be passed at one time.

The examination shall be in part by means of papers  
and in part practical and oral. To pass, 40 per cent of  
marks shall be required for the written and oral, 50 per  
cent in the practical part of the examination, and 50 per  
cent in the aggregate of the whole examination. Candi-  
dates who obtain 75 per cent of marks will be granted  
distinction.



### C.—COURSES OF STUDY.

The courses of study shall be in four Divisions:—

*Division I.—Dental Anatomy and Histology:*

Dental Anatomy and Histology (Normal.)

Comparative Dental Anatomy.

*Division II.—Prosthetic Dentistry:*

Prosthetic Dentistry and Technique.

Crown and Bridge work.

Dental Metallurgy.

*Division III.—Surgical Dentistry:*

(a) Oral Surgery and Dental Pathology.

(b) Operative Dentistry and Technique.

Anæsthesia.

Dental Radiology and electro-therapeutics

Orthodontia.

Exodontia.

*Division IV.—Dental Dresser:*

#### DETAILED COURSES OF STUDY.

*Division I.—Dental Anatomy and Histology:*

This course will constitute of—

- (1) Study of the development of teeth,
- (2) Anatomy and Histology of teeth, and
- (3) A comparative study of teeth and Dental Arches as found in the animal kingdom.



*Division II.—Prosthetic Dentistry:*

*(a) Denture making.*

Principles of prosthetic restorations. Choice of impression trays. Impression materials. Teeth and their selection. Cases, advantages and disadvantages, Modes of retention of the full and partial dentures. Appliances for cleft palate. Making of splints for fractures.

*(b) Crown and Bridge work.*

The various type of crowns. Preparation of roots. Sanitary and Saddle bridges. Removable bridge work.

*(c) Dental Metallurgy.*

Separation of metals from their ores. Refining and properties. Study of the metals used in Dentistry. Preparation and properties of various alloys. Nature, manufacture and testing of amalgams.

*Division III.—Surgical Dentistry:*

*(a)* General principles of Surgery, particularly as applied to oral cavity, aseptic and antiseptic procedure in their relations to general practice of Dentistry. Dental aspects of operations for hare-lip, cleft palate. Tumours and Necrotic intra-oral conditions.

The diagnosis, prognosis and treatment of acute and chronic alveolar abscess, Pyorrhœa alveolaris, Stomatitis, Leucoplakia, and other pathological conditions



of the Jaws. Bleaching of teeth, care of children's teeth. Pre-natal Dental hygiene, Dental diseases and their relation to general systematic conditions.

(b) Classification of cavities, Filling materials, Pulp chambers and canals, and Root canal fillings.

The lectures are to be supplemented by technique work in the Laboratory and in the Dental Clinic.

#### *Anæsthesia.*

Principles and practice of both terminal and conduction anæsthesia. General anæsthesia in relation to Dentistry.

#### *Exodontia.*

Technique of the extraction of teeth; removal of the impacted teeth.

#### *Radiology and Electro-therapeutics.*

X-Ray as applied to Dentistry. The use of high frequency current in the treatment of Dental diseases. Ionization and ultra-violet rays in Dentistry.

#### *Orthodontia:*

Basic principles. The development and growth of tissues involved in the correction of mal-occlusion. Classification of mal-occlusions. The various methods of mal-occlusion and facial deformities.

*Division IV.*—The students shall work throughout three terms and before Part I of the Degree examination as a Dental Dresser in the Dental Out-patient Department.



(2)—The four years' course for under-graduate students.

A—REGULATIONS.

1. *Admission*.—Admission to the four years' under-graduate course of instruction shall be through a Pre-Dental examination which shall be held at the same time in the same subjects and on the same conditions as those laid down for the Pre-Medical examination.

2. Students entering for the Pre-Medical and Pre-Dental examinations shall specify on their application form whether they desire admission (1) to the M. B. B. S. course only, (2) to the B. D. S. course only, or (3) either the M. B. B. S. or the B. D. S. course, specifying in addition their preference.

3. In addition to the examination for Parts I, II and III of the Degree of B. D. S. specified under the two years' course, an under-graduate dental student will be required to take an examination in General Anatomy and Physiology in April at the end of his first year. One paper divided into two halves with 3 questions in Anatomy and 3 in Physiology set by the Heads of the Departments of Anatomy and Physiology respectively, with a *Viva Voce* by the Heads of the Departments of Anatomy and Physiology sitting with a Dental Surgeon.

4. Further at the end of his third year, an under-graduate dental student will be required to pass an examination in General Medicine, Surgery, Pathology (including Bacteriology) and Pharmacology. One paper of six questions to be divided into two parts, the first part to be set by a Dental Surgeon, and the second part by an examiner selected from one of the teachers in one of the four subjects. *Viva Voce*.

5. Pass marks required: 40 per cent in papers and 50 per cent in Aggregate. Distinction: 75 per cent.



B.—SCHEME OF EXAMINATION.

I.—In April of the first year.

General Anatomy (1) One paper—6 ques-  
and Physiology. tion.  
3 hours—100 marks.

General Anatomy (2) *Viva Voce*—50 marks.  
and Physiology.

II.—In April of the second year.

B. D. S. Part I.—(a) Dental Anatomy, Human  
and Comparative Histology and Embryo-  
logy—6 questions of 100 marks, 3 hours, to  
be divided into two parts, the first part to be  
set by the teacher in Anatomy and the second  
part by the teacher in Physiology—*Viva Voce*  
50 marks.

(b) Prosthetic Dentistry and Dental Metallurgy.  
(As for the Two Years' Course).

III.—In April of the third year.

General Medicine, Surgery, } (1) One Paper—6  
Pathology, and Phar- } questions.  
macology. } 3 hours—100  
marks.

Do. Do. (2) *Viva Voce*—  
50 marks.

B. D. S. Part II—Prosthetics, Practical.  
(As for the Two Years' Course)

IV In April of the fourth year.

B. D. S. Part III.

(As for the Two Years' Course).



## *C—COURSES OF STUDY.*

### *I.—During the first year:*

A course of lectures—

- (1) on General Anatomy, with practical dissection of the head and neck only;
- (2) on General Physiology, with practicals in Histology only and without experimental or Chemical Physiology;
- (3) on Dental Metallurgy as prescribed for the Two Years' Course.

### *II.—During the second year:*

- (1) A course of lectures on Dental Anatomy and Histology, as prescribed for the Two Years' Course.
- (2) Practical work as clinical clerks for 3 months in the Surgical Out-patients.
- (3) Practical Prosthetics, in the mechanical laboratory of the Dental School, each afternoon over two years as prescribed for the Two Years' Course.
- (4) Morning attendance on patients in the Prosthetic Room, as required.

### *III.—During the third year:*

A course of lectures, with third year Medical students, on—

- (1) General Surgery—20 lectures (approximately).
- (2) General Medicine—20 lectures (approximately).



- (3) Pathology including Bacteriology—10 lectures (approximately).
- (4) Pharmacology—10 lectures (approximately).
- (5) Practical Prosthetics in the mechanical laboratory of the Dental School, each afternoon as prescribed for the Two Years' Course.
- (6) Work on the "Dummy" will commence in July of the third year.
- (7) Before appearing for B. D. S. Part II Examination the student must have completed at least six upper and lower full dentures and such other available cases as may be determined by the Dental Surgeons.

*IV. During the fourth year:*

The lectures prescribed for Part III of the B. D. S. in the Two Years' Course in Dental Surgery, Operative Dental Surgery, Anæsthesia, Radiology, Materia Medica and Therapeutics, Dental Pathology and Orthodontia.

DETAILED COURSES OF STUDY.

*Anatomy.*—Anatomy of the head and neck (brain not included) and a brief survey of the general anatomy of the body (including the brain). Study of the bones of the Cranium and the Mandible and Maxilla, with a general survey of the other bones of the body.

*Physiology.*—Such systematic instruction as is necessary to the understanding of the Physiological Phenomenon of life and the study of diseases.

*Materia Medica and General Therapeutics.*—This course will cover the sources, constituents, chemical composition, physical properties, official preparations, physiological action, toxicology doses and therapeutic use of those



medicines used in Dentistry together with instruction in prescription-writing.

*Pathology.*—The course will consist of lectures and laboratory work. The lectures will cover both the elementary general and special pathology, including especially the chapters on inflammation, repair, circulatory disturbances and tumours. The laboratory work will cover the microscopic and microscopic study of diseased tissues, the principles of examining blood, urine and other body fluids.

*Bacteriology.*—A general introduction is to be given to the subject, emphasizing chiefly (1) the relation of bacterial toxins to the production of diseases, (2) the theories of intoxication and of cytotoxic process bearing on problems in general pathology, (3) immunity, (4) infection, (5) the elements of the morphology, cultural and staining characteristics of pathogenic bacteria, and (6) common disease producing animal parasites and their demonstrations.

*Surgery.*—The principles of general Surgery particularly as applied to (1) the oral cavity. (2) aseptic and antiseptic procedures, and (3) their relations to general practice of Dentistry.

*Medicine (Physical Diagnosis)*—History taking and the elements of the physical examination of the heart, lungs, kidneys, with special application to the indications and contra-indications for anaesthetics. The student should attend a limited number of bedside clinics.



## CHAPTER XII.

### THE EXAMINATIONS\*—FACULTY OF MEDICINE (ANCIENT AND MODERN)

#### Bachelor of Medicine and Bachelor of Surgery.

#### A.—ORDINANCES AND REGULATIONS

1. No candidate shall be admitted to this Course  
Ordinances. unless:—

- (i) he is a *bona-fide*† resident of the Uttar Pradesh;

\*The medium of instructions and examinations shall be Hindi written in Devanagari character.

†A *bona-fide* resident of the Uttar Pradesh is:—

(a) a citizen of India, the domicile of origin of whose father is in the Uttar Pradesh; or

(b) a citizen of India, the domicile of origin of whose father was not in the Uttar Pradesh but, who or whose father has acquired a domicile in the Uttar Pradesh, provided that the candidate himself has after such acquisition, resided in the Uttar Pradesh for not less than five years at the date on which he applies; or

(c) a citizen of India, who has born in the Uttar Pradesh and whose father is (or, if dead, was at the time of his death) employed in any department of the Central Government and is, or was, liable to inter-provincial transfers, provided that he has himself resided in the Uttar Pradesh, for three continuous years immediately preceding the date of application; or

(d) a student of Indian origin from abroad whose ancestors were domiciled in the Uttar Pradesh; or

(e) (i) a citizen of India, and

(ii) a person who has migrated or may hereafter migrate from Pakistan to reside permanently in this State

in whose favour a declaration of eligibility has, except as hereinafter provided, been issued by the Governor of the Uttar Pradesh.

A declaration of eligibility as required by clause (e) above will be given by the Governor after considering each case on merit; provided that no declaration of eligibility will be required in the case of persons

(Continued on the next page)



(ii) he has passed the Intermediate Examination of the Board of High School and Intermediate Education, U. P., or Rajputana (including Ajmer-Merwara), Central India and Gwalior, or the Intermediate Examination of an Indian University incorporated by any law for the time being in force, with Chemistry (including Organic Chemistry), Physics and Biology, in such courses of study as may be recognised for the purpose from time to time by the Faculty of Medicine (Ancient and Modern)‡.

2. Except as hereinafter provided, no candidate shall be admitted to the degree of Bachelor of Medicine and Bachelor of Surgery unless he shall have attended the prescribed courses of study extending over a period of not less than six academic years.

Those students who have already passed the Intermediate in Science with Biology shall be exempted from the Preliminary Examination and shall be eligible for admission direct to the second year of the Course.

who migrated from Pakistan to reside permanently in this State on or after July 19, 1948, but *before* September 30, 1948.

‡The following Sanskrit Examinations with the English Examination of the Sanskrit Section in the Oriental Department, Lucknow University, or the Matriculation Examination in English of an Indian University established by law or of a Board of Education of any State in India, have been recognised as equivalent to the Intermediate Examination for purposes of admission to the Faculty of Medicine (Ancient and Modern) :—

The Madhyama Examination of the Government Sanskrit College, Banaras the Preliminary Examination for the Oriental Title of Shiromani of the Madras University, the Shastri Degree of the Lucknow University, the Shastri Examination of the Punjab University, the Shastri Examination conducted under the authority of the Government of Bihar and Orissa, or an equivalent examination of some other institution recognised by the University.



There shall be a Preliminary Examination in the following subjects at the end of the first year:—

- (i) भौतिकी (Physics), (ii) रसायन (Chemistry),  
(ii) जीवविज्ञान (Biology).

The work in the sixth year may consist of clinical work including clinical lectures only. The necessary attendance must be put in at the University hospital or such other hospital or institution as may be recognised by the University.

3. The First Professional Examination shall be in the subjects of Anatomy and Physiology. (Charak Saushrutiya Ancient and Modern).

Candidates before presenting themselves for this examination shall produce evidence of—

- (1) having completed the second year of medical study,
- (2) having attended complete courses of instruction approved by the University in Anatomy and Physiology,
- (3) having dissected the human body at least once,
- (4) having attained proficiency in Sanskrit and producing a Certificate to the effect from the teacher in Sanskrit.

Candidates who fail in one subject only securing not less than 33 per cent marks shall be eligible to re-appear at a Supplementary First B.M.B.S. Examination to be held in the last week of July, only in the subject in which they fail at the April examination. But if they fail in both the subjects or in one subject obtaining less than 33 per cent



of marks, they shall be declared to have failed and shall have to appear in both subjects at any subsequent examination. Students who fail to pass at the Compartmental examination in July shall have to appear in both subjects at any subsequent examination.

Candidates who fail to appear in or to pass the First Professional Examination in five successive attempts shall not be allowed to continue their studies except with the special permission of the Faculty.

Candidates who fail to satisfy the examiners must, before re-admission to a subsequent examination, produce evidence of having pursued such further courses of study as they may be required to do by the Dean of the Faculty, in consultation with the Head of the Department concerned.

4. The Final Professional Examination shall consist of two Parts *viz* :—

(A) *Part I.*

Dravya Guna, Ras Shastra, Pharmacology, विकृत-विज्ञान (Pathology) and कीटाणु शास्त्र (Bacteriology); and रसायन और बाजीकरण

Candidates before appearing for this examination must produce evidence (a) of having passed the First B.M. B.S. Examination, (b) of having devoted, during the period of two years subsequent to their passing the First B.M. B.S. Examination, a part of their time in clinical study, (c) of having completed their third and fourth years of study, and (d) of having passed the class tests in Rasayna and Baji-karan.

अगदतन्त्रव्यवहारायुर्वेद (Jurisprudence)

and स्वास्थ्यवृत्त (Toxicology and Medical Hygiene).



An examination in Part I shall be held at the end of the fourth year of the student's medical course.

(B) *Part II.* काय-चिकित्सा (Medicine) including चिकित्सा (Therapeutics) चिकित्स्या विकृति-विज्ञान (Medical Pathology) and मानस-रोग (Mental Diseases).

शल्य (Surgery), including शल्य शारीरिक (Surgical Anatomy) शल्यकीय विकृत-विज्ञान (Surgical Pathology) and शालाक्य (Ear, Nose and Throat), नेत्र रोग (Ophthalmology) and प्रसूति स्त्री-रोग (Obstetrics and Gynæcology).

Candidates before appearing for this examination must produce evidence of—

- (a) having passed the Final B.M. B.S. Part I Examination and of having completed their sixth year of study in the Faculty;
- (b) having undergone a course of instruction in भूत-विद्या (Mental Diseases);
- (c) having received a course of instruction in the University in the following subjects:—

- I.—(i) शय्यास्थानिक (Clinical Medicine).
- (ii) राजयक्ष्मा (Tuberculosis).
- (iii) संक्रामक रोग (Infectious Diseases).
- (iv) कौमार भृत्य (Children's Diseases.)
- (v) त्वचागत रोग (Diseases of the Skin).
- (vi) Medical Radiology and Medical Electro-therapy.
- (vii) चिकित्सकीय नीति-शास्त्र (Medical Ethics).



- II.—(i) शल्यस्थानिक शल्य (Clinical Surgery).  
 (ii) मृतकोपरि शल्य (Operative Surgery) and  
 शल्य शारीरक (Surgical Anatomy).  
 (iii) शालाक्य (Diseases of Ear, Nose and  
 Throat).  
 (iv) जननेन्द्रियक रोग (Venereal Diseases).  
 (v) अस्थिगत रोग (Orthopædics).  
 (vi) दन्तगत रोग (Dental Diseases).  
 (vii) संज्ञाहरण (Anæsthetics).  
 (viii) Surgical Radiology and Surgical  
 Electro-therapy.

(d) having—

- (i) attended as a clinical clerk in the Medical  
wards for six months,  
 (ii) attended as a surgical dresser in Surgical  
wards for six months,  
 (iii) attended as a clinical clerk in the Obstetric  
and Gyæcological wards for three  
months,  
 (iv) attended as a clinical clerk in the Ophthalmic  
wards for three months,  
 (v) attended the Medical Out-patients Section  
and the Surgical Out-patients Section  
for separate periods of three months  
each,  
 (vi) attended post-mortem clinics for two years,  
 (vii) acquired proficiency in Vaccination.

5. (a) Before any re-examination all candidates shall undergo such courses of further study as may be prescribed by the Dean, in consultation with the Head of the Departments concerned.



(b) Any candidate who has been admitted to Part I or Part II of the Final examination and has failed, but yet has passed in one or more subjects need not re-appear within a period of nineteen months in those subjects which he has already passed, provided he has secured not less than 33 per cent marks in each of the remaining subjects. If the candidate fails to appear at any subsequent examination, or on re-examination, as permitted by this rule, fails to secure the prescribed minimum pass marks, within nineteen months in the remaining subjects, he shall be required to re-appear in all subjects, at any subsequent examination.

(c) All candidates who obtain less than 33 per cent of marks in one or more subjects shall re-appear in all subjects at the next examination.

(d) Candidates unable to appear in one or more subjects owing to illness will be treated in respect of those subjects as candidates who had failed therein, but obtained more than 33 per cent of marks. No concession will be given to a student for such illness unless he is treated for the same in a ward of Gandhi Memorial and Associated Hospitals and is certified by the Physician or Surgeon by whom he is being treated that he is unfit to appear at the examination in those subjects. The Vice-Chancellor, on the recommendation of the Heads of Departments concerned and of the Dean, may extend, if necessary, the period of credit under clause (b) for subjects in which the sick student has already passed, provided he has passed in not less than three of them.

(e) Candidates failing in all subjects will not be entitled to any of the foregoing concessions.

6. The Professional examinations will be held twice a year, ordinarily in April and October.



7. Prizes and scholarships shall be awarded on the results of the April examination only.

8. Distinction and Honours shall be awarded only to those students who appear for the first time.

### \*General

Regulations. 1. Before attending any class, students must obtain an Admission form from the Dean which they must at once present to the Registrar, paying at the same time any fee which may be due. Until this is done no credit will be given for attendance upon any course.

2. The class and the University examinations must be taken during the year and in the order specified in the curriculum unless a student obtains written permission from the Dean to vary the order of studies. In no case will the student be permitted to enter upon hospital study until the First Professional Examination shall have been passed.

3. The following factors will be taken into consideration in determining the class work in each subject:—

- (i) Regularity in attendance;
- (ii) Periodical exercises and class examinations; and
- (iii) Laboratory note-books during the prescribed course.

4. Class examinations will be held at the discretion of the Head of the Department concerned, but at least once during the session in all the subjects of the First Professional Examination, and once during the whole

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\*Students will be required to use the same dress as has been prescribed for the Faculty of Medicine.



course of lectures in the subjects for the Final Professional Examination.

Attendance at these examinations is compulsory, but the Dean may, in exceptional cases, exempt students from these class examinations for special reasons, with or without imposing a condition of subsequent examination.

5. (a) Students are required to make reasonable preparation for class examinations and, if they fail to do so, may be fined. When an examiner finds that any student has not been able to secure at least 20 per cent marks he shall report the case to the Dean, who will call for an explanation and if he, in consultation with the Head of the Department, considers that the explanation is not satisfactory, he may fine the student upto Rs. 5.

(b) Any student who fails to attend a class examination and is not on leave or ill in the wards will be fined Rs. 5 for the absence.

6. The Dean may, at any stage, in consultation with the Head of the Department concerned, debar a student from taking further courses of study if his class work proves so unsatisfactory as to make it clear that he is not likely to profit by them. This applies specially to the second year class.

7. Students who fail to attend the prescribed lectures and to perform the prescribed exercises or to attend the class examinations will not be admitted to the University examinations.

8. A class Schedule Card will be maintained for each student for the different examinations. The Dean will obtain the signature of the student's teachers at the end of each course of lectures or practical instruction and will send the Card to each Head of Department for final completion before the commencement of each examination. This Card must contain a statement that the



student has attended not less than three-fourths of the lectures and practical classes and not less than 85 per cent of clinical instruction of which the course consists, together with such class examinations or exercises as each teacher may prescribe in connection with his own course. This Card will be submitted to the examiners at the University examination, as required. These Cards will finally be deposited in the Dean's Office for record. After a lapse of 10 years from the date of graduation they may be destroyed.

9. (a) Ordinarily no extra lectures, demonstrations, practicals or clinicals, shall be given to students whose percentage of attendance falls short of the required number.

(b) If a student has not attended the full 75 per cent of lectures, demonstrations, practicals and the 85 per cent of clinicals required in any subject, but falls short of the percentage by a number of lectures, demonstrations, practicals or clinicals by not more than six, he may be allowed to make good his deficiency in a subsequent term by attendance on the number of lectures, demonstrations, practicals or clinicals deficient in that subject, provided the attendances are on consecutive classes.

(c) If, however, the deficiency amounts to more than a total of 6 lectures, demonstrations practicals or clinicals, the students must attend 75 per cent of all lectures, demonstrations, practicals and 85 per cent of clinicals in that subject delivered during a subsequent term; and if that additional number be insufficient to make good his original deficiency he must continue such attendance to the end of the session.

(d) Shortage in Hospital clinical instruction ordinarily may be completed in the period assigned for "Optional Cliniques". If the deficiency cannot be completed in that period, the student should make good his original deficiency in a subsequent term or session.



### Examinations.

1. In the question-papers there will be no optional questions. An average of at least half an hour should be allowed for a candidate to answer each question.

2. In every subject there shall be an external examiner and one or more internal examiners. External examiners should be appointed or re-elected for at least three consecutive years as far as possible.

In all clinical examinations, the examiners will observe the candidate make his examination of the patient, or the candidate will be made to demonstrate his method to them.

In the several class and University examinations, the examiners, in assessing marks, are empowered to take into account the duly attested records of work done by the candidate throughout his course of study in the subject of the examination.

3. In those subjects for which there is only one question-paper, the paper should be divided into two parts, each containing three questions. Three questions should be set by the internal examiner and three questions should be set by the external examiner. Each part should be answered in separate answer books.

In all written examinations, questions in each subject should have the approval of both the external and internal examiners appointed for that part of the subject.

Compensation in respect of marks as between the four different portions of the Final Examination, *viz.*, Medicine, Surgery, Ophthalmology, Midwifery, will not be given.



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4. The Final Examination in Part II should include Clinical and Practical examinations in Obstetrics and Gynæcology.

5. In the appropriate papers and practical examinations of the Final B. M. B. S., Part II, as well as in class examination, questions in diseases of the Ear, Nose and Throat, Teeth or Skin, in diseases of Children and Infants, on X-Ray interpretation and on Electrotherapeutics, on Venereal diseases and Tuberculosis, Anæsthetics and on the special instruments, a technique employed in these special subjects, may be asked.

6. As far as possible in the Final examinations in Medicine, Obstetrics and Gynæcology, Ophthalmology and General Surgery, prevention of disease shall form part of the examination.



## B.—SCHEME OF EXAMINATIONS.

Degree of Bachelor of Medicine and Bachelor of Surgery (Ancient and Modern)—Order of Examinations.

### Preliminary Examination.

Subject	Written.	Marks.	Oral and Practical.	Pass Marks.
भौतिकी (Physics)	2 Papers	50 each	50	Written 33%
रसायन (Chemistry)	2 Papers	50 each	50	
वनस्पतिशास्त्र (Botany)	2 Papers	50 each	50	Practical 33%
जन्तु-शास्त्र (Zoology)				

Time allowed for each Paper—3 hours.

### First Professional Examination.

Subject.	Written	Marks	Oral and Practical.	Pass Marks.	Distinction.
शरीर-रचना (Anatomy)	2 Papers 3 hours each Five questions in each paper, all to be at- tempted.	150	150	Written 50%	75%
शरीर-क्रिया (Physiology)	2 Papers 3 hours each Five questions in each paper, all to be at- tempted.	150	150	Oral and Practi- cal 50%	
				Aggregate 50%	75%

If a candidate obtains an aggregate of 75% in two subjects he will be declared to have passed with Honours.



## Final Professional Examination, Part I.

	Written. 1 Paper	Marks. 100 100	Pass Marks. Written 50%	Distinction 75%	
द्रव्यगुण	1 Paper	100 100			
रस-शास्त्र	1 Paper	100 100			
Pharmacology	1 Paper 3 hours	150 150			
including Pharmacy, Materia Me- dica and Phar- macological Therapeutics	6 question, all to be attempted		Oral & Practi- cal 50%	75%	
Pathology	2 Paper 5 questions in each paper, all to be at- tempted.	150 150	Aggregate 50%	75% 75%	
		Marks	Pass Marks.	Aggre- gate.	Distinction.
व्यवहारायुर्वेद	1 Paper 3 hours	Written 150	50%		
अगदतंत्र (Medical Jurisprudence and Toxicology).	6 questions, all to be at- tempted	Oral 150	50%	50%	75%
स्वास्थ्य वृत्त	1 Paper 3 hours	Written 150	50%		
(Hygiene)	6 questions, all to be at- tempted	Oral 150	50%	50%	75%

## Final Professional Examination, Part II.

- चिकित्सा (Medicine)—1 Paper, including चिकित्सा शारीरिक (Medical Anatomy) चिकित्स्य विकृति-विज्ञान (Medical Pathology) and चिकित्सा (Therapeutics)—3 hours—Five questions all to be attempted.



- 1 Paper, including चिकित्सा (Therapeutics) and क्रान्ति-मंडलीय रोग (Tropical Diseases)—3 hours—Five questions, all to be attempted.

*Viva Voce*—10 minutes.

*Prescription Writing*—10 minutes.

*Practical and Clinical Examination.*

*Practical Examination.*—Including the examination of the secretions and urine, pathological specimens and clinical microscopy.

*Clinical Examination.*—One medical case for which at least one hour will be allowed to the candidate for his examination and report, exclusive of the time devoted to the interrogation of the candidate by the examiners.

Brief clinical examination of other medical cases which may include diseases of children.

which may include diseases of children.			
	Marks.	Pass	Aggregate 50% Distinction 75%
100—Papers	50 each	50%	
100—Clinical	40—long cases	50%	
	60—short cases		
100—Practical and Oral	30 Oral	50%	
	20 Specimens and Slides.		
	20 Instruments and Skiagrams.		
	30 Prescription Writing and <i>Viva Voce</i> exa- mination.		



## 2. शल्य शालाक्य (*Surgery and Ophthalmology*).

1 Paper, including शल्य शारीरिक  
(Surgical Anatomy). Five questions,  
3 hours. all to be  
attempted.

1 Paper, including शल्यकीय  
विकृति-विज्ञान (Surgical do.  
Pathology), 3 hours.

*Viva Voce*.—10 minutes.

*Practical and Clinical Examination.*

शल्य शारीरिक (Surgical Anatomy) and Instruments.—  
15 minutes.

मृतकोपरि शल्य-क्रिया (Operative Surgery)—Two opera-  
tions on the cadaver.

*Clinical Examination* —One Surgical case for which  
at least one hour will be allowed to  
the candidate for his examination  
and report, exclusive of the time  
devoted to the interrogation of the  
candidate by the examiners.

Brief clinical examination of other surgical cases  
which may include diseases of children.

	Marks.	Pass	Aggregate 50%	Distinction 75%
100—Papers.	50 each.	50%		
100—Clinical.	40—long cases.	50%		
	60—short cases.			
100—Practical and Oral.	30 Oral	50%		
	20 Specimens			
	30 Operative Surgery.			
	20 Instruments and Skiagrams			



3. नेत्र-रोग (*Ophthalmology*).—1 Paper—3 hours—six questions—all to be attempted.

Practical and Clinical Examination, including pathological specimens and long and short cases.

Marks		Pass		
100—Paper	50 each part	50%	} Aggregate 50%	Distinction 75%
100—Oral and Practical.		50%		
100—Clinical	{ 40—long cases 60—short cases }	50%		

4. प्रसूति स्त्री-रोग (*Obstetrics and Gynæcology*).—1 Paper—Six questions including both subjects—all to be attempted—3 hours.

*Viva Voce* 10 minutes, including instruments and assessments of student's records of Obstetric cases and his knowledge in Infant Hygiene.

*Practical and Clinical Examination*

*Practical Examination*—Pathological specimens, etc.

*Clinical Examination*—Of patients in Hospital Wards.



	Marks.	Pass	
100—Paper	50 each part	50% }	
100—Clinical	<div> <div>Obstetric cases—60</div> <div>Gynæcological cases—40</div> </div>	50% }	<div>Aggregate 50%</div> <div>Distinction 75%</div>
100—Oral and Practical	....	50% }	

*General:—*

If a candidate obtains an aggregate of 75 per cent in four subjects, including काय-चिकित्सा (Medicine) or शल्य (Surgery) and विकृति-विज्ञान (Pathology), he will be declared to have passed the Final examination with Honours.

A candidate may, at the discretion of the examiners, be prevented from attending the Clinical part of the examination in the subject in which he has failed to satisfy the examiners.

Only those candidates will be considered qualified for Honours or Distinction who passed the Degree examination in the first attempt in each Part.



C,—पाठ्य-क्रम (COURSES OF STUDY).

प्रारम्भिक परीक्षा (PRELIMINARY EXAMINATION).

भौतिक-शास्त्र (Physics)	}	Same as for Intermediate Examination.
रसायन-शास्त्र (Chemistry)		
वनस्पति-शास्त्र (Botany)		
जन्तु-शास्त्र (Zoology)		

प्रथम उपाधि-परीक्षा

(FIRST PROFESSIONAL EXAMINATION)\*

संस्कृत (SANSKRIT).

वर्ण, शब्द, क्रिया, समास, कृदन्त आदि का ज्ञान, अनुवाद ।

पाठ्य पुस्तकें—

संस्कृत-सुबोधिनी

संस्कृत-व्याकरण ( भण्डार कर )

सरल रचनानुवाद-शिक्षक

आचार्यादि परिज्ञान (चरक)

शरीर-शास्त्र (ANATOMY).

( क ) चरक एवं सुश्रुत-मतानुसार शरीर-रचना की व्याख्या ।

आधुनिक मतानुसार मानव-शरीर की रचना एवं गर्भ-विज्ञान (Embryology).

(ख) सम्पूर्ण मानव-शरीर का छेदन ।

नोटः—

संपूर्ण पाठ्य-क्रम दो वर्ष में समाप्त होगा ।

अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।

\*Subject to alteration and revision as soon as the Faculty of Medicine has revised courses of studies prescribed for the M.B. B.S. degree in accordance with the recommendation of the Medical Council of India.



पाठ्य-ग्रन्थः—

सुश्रुत-संहिता शरीर स्थान (डा० जे० डी० शर्मा)

चरक-संहिता ।

अष्टाङ्ग-हृदय ।

Cunningham: Practical Anatomy.

Cunningham: Text-Book of Anatomy.

Gray: Text-Book of Anatomy.

Siddiqi: Anatomical Atlas of Human Body.

आलोच्य ग्रन्थः—

Berry: Practical Anatomy.

J. Fraser: Osteology.

J. Fraser: Embryology.

Buchanan's: Anatomy, edited by J. Fraser.

प्रत्यक्ष शरीर (गणनाथ सेन)

बृहच्छरीर (वारियर)

शरीर-क्रिया-विज्ञान (PHYSIOLOGY).

(क) चरक-सुश्रुतानुसार दोष, धातु रक्त, मांस, मल आदि का अध्ययन ।

२. आधुनिक मतानुसार रक्त, रक्त-संवहन, श्वास-क्रिया, (Respiration) रसवहन पाचन (Digestion), पुरीष-वहन एवं मूत्र-वहन (Excretion) आदि क्रियाएं ।

३. वात-संस्थान (Nervous system) के कार्य एवं उनका उपरोक्त क्रियाओं से संबंध ।

४. इन्द्रियों (Sense organs) एवं मन (Psychological) (Physiology) के कार्य ।

५. स्वर-यन्त्र एवं स्वर (Voice and speech).



६. प्रणाली-विहीन ग्रंथियों (Ductless glands), के कार्य ।

७. शारीरिक रसायन (Bio-chemistry) एवं भौतिक विज्ञान (Bio-physics).

८. संज्ञाहरण की क्रिया (Physiology of Anaesthesia).

(ख) अणुवांक्षण यन्त्र द्वारा भिन्न-भिन्न शारीरिक तन्तुओं की पहचान । शारीरिक तन्तुओं का रचना-प्रदर्शनात्मक निर्माण । मांस, नाड़ी एवं वातसंस्थान की क्रियाओं का मंडूक पर प्रदर्शन ।

शारीरिक क्रिया को प्रभावित करनेवाले द्रव्यों की पहचान । स्वाभाविक एवं अस्वाभाविक मूत्र के अवयवों की मात्रा का निर्धारण ।

नोट:—अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।

पाठ्य-ग्रंथ:—

1. चरक-संहिता ।
2. सुश्रुत-संहिता ।
3. अष्टाङ्ग-हृदय ।
4. त्रिदोष की आधुनिक व्याख्या ।  
( डा० जे० डी० शर्मा )

Halliburton: Manual of Physiology.

Halliburton: Essentials of Chemical Physiology.

Schafer: Essentials of Histology.

Schafer: Essentials of Experimental Physiology.

आलोच्य ग्रन्थ:—

शरीर तत्त्व-दर्शन ( पुरुषोत्तम हिलेकर )

Principles of Tridosh (D. N. Banerji).



## द्रव्य, गुण, रस-शास्त्र एवं (MODERN PHARMACOLOGY).

(१) द्रव्य-परिचय (Materia Medica).

क—स्वदेशीय (Indigenous) एवं प्रमुख विदेशीय (Foreign) द्रव्यों के प्राप्ति-स्थान (Source), रूप (Characters), एवं योग (Preparations).

ख—द्रव्यों के सक्रिय तत्त्वों के (Active Principles) भौतिक (Physical) तथा रासायनिक (Chemical) गुण ।

ग—द्रव्यमान (Metrology).

(२) द्रव्य-क्रिया (Pharmacology).

द्रव्यक्रिया का रस-गुणात्मक (Physical), वीर्य-विपाकात्मक (Chemical) एवं प्रभावात्मक (Selective) आधार ।

औषधि-प्रयोग की विधियाँ ।

द्रव्यक्रिया को प्रभावित करनेवाली दशाएँ ।

(३) द्रव्यों के चिकित्सात्मक प्रयोग (Pharmacological Therapeutics).

(४) भैषज्य-कल्पना (Pharmacy).

(क) भैषज्य-निर्माण की विधियों (Pharmaceutical Processes) तथा कल्पित द्रव्यों (Preparations) की परिभाषा ।

(ख) औषधि-निर्माण के सिद्धान्त, गुण-विरोध (Incompatibility) निम्नयोगों का निर्माण:—मिश्रण (Mixtures), क्वाथ (Decoctions) कषाय (Infusions), चूर्ण (Pulveres), भस्म, रसादि, वटी (Pills), अवलेह (Confections), घृत-



(Medicated Butter), तैल (Olea) अर्क (Aquae), आसवारिष्ट (Vina) पानक (Syrups) प्रलेप (Ointment and Plasters), गुदवर्ति (Suppositories).

( ग ) द्रव्य-क्रिया का परीक्षण (Experimental Pharmacology) निम्नांकित अवयवों पर द्रव्यों का प्रयोग:—  
रक्तवाहिनियाँ (Blood vessels) हृदय (Heart),  
अन्त्र (Intestines), गर्भाशय (Uterus), वातसंस्थान (Nervous System), रस (Secretions) तथा लोमश उपकलाएँ (ciliated Epithelium).

( घ ) शय्यास्थानिक चिकित्सा (Clinical Therapeutics).

नोट:—सम्पूर्ण पाठ्यक्रम ३ वर्षों में समाप्त होगा।

अध्यापन यथासंभव तुलनात्मक रीति पर होगा।

पाठ्यग्रन्थ:—सुश्रुत-संहिता, चरक-संहिता, अष्टाङ्ग-हृदय,

भावप्रकाश, शाङ्गधर,

Clark: Applied Pharmacology.

Cushney: Pharmacology and Therapeutics.

Dixon: Practical Pharmacology.

Gaddum: Pharmacology.

Therapeutics: Gujral: Loose Leaf Modern Medical Treatment.  
Beckman: Treatment in General Practice.

आयुर्वेद-प्रकाश (श्रीसोमदेव टीका): रस-रत्न-समुच्चय (अम्बिकादत्त)

आलोच्य ग्रन्थ:—

रसेन्द्रसार संग्रह ( घनानन्द पन्त ):

भारतीय रस-पद्धति ( अत्रिदेव ): द्रव्य गुण-विज्ञान-(यादवजीर):

रस-कामधेनु ( श्रीसोमदेव ): रस-जल-निधि ( भूदेव मुखोपाध्याय):

वनौषधि-दर्शिका ( बलवन्तसिंह )



## स्वस्थवृत्त (HYGIENE).

१. प्राचीन मतानुसार स्वस्थवृत्त के मुख्य सिद्धान्त ।
२. आधुनिक स्वस्थवृत्त, व्यक्तिगत स्वस्थवृत्त, भोजन एवं आहार ।
३. निवास-स्थान का निर्माण ।
४. वायु एवं वयजन (Air and Ventilation)
५. जल ।
६. मल का निराकरण (Disposal of refuse and excretal matters).
७. औद्योगिक स्थानों की स्वास्थ्य-रक्षा, व्यावसायिक रोग, व्यवसाय और उनका स्वास्थ्य पर दुष्प्रभाव । स्वास्थ्य नाशक
८. ऋतु और वातावरण संबंधी ज्ञान (Climate and Meteorology); उनका स्वास्थ्य पर प्रभाव ।
९. जनपदोद्भवस के कारण (Endemics and Epidemics), संक्रमण के प्रकार, संक्रमण रोकने के उपाय, देश-विचार तथा प्रकृतिविचार, मशक, मल्लिका आदि ।
१०. राजयक्ष्मा एवं कुष्ठ का प्रतिरोध, टीका लगाना, पृथक्करण, निर्दोषीकरण ।
११. आयुबल परिगणन (Vital Statistics), मृत्यु का वास्तविक प्रमाणीकरण ।
१२. बालमृत्यु के कारण तथा रोकने के उपाय—ग्राम तथा शहरों में स्वास्थ्य-रक्षा के उपाय ।
१३. विद्यालयों की रचना तथा विद्यार्थियों की स्वास्थ्य-रक्षा ।
१४. ग्रामों में स्वास्थ्य-रक्षा ।
१५. मेलों में स्वास्थ्य-रक्षा के उपाय ।
१६. जनता स्वास्थ्य-विधानों के संबंध में चिकित्सकों का उत्तरदायित्व ।



आलोच्य ग्रन्थ

स्वास्थ्य विज्ञान ( डा० मु० स्व० वर्मा )

१७. स्थायी तथा अस्थायी औषधालयों का कर्तव्य ।  
प्रदर्शनात्मकः—

जल का परिस्रवण, जल-संवहन-विधि (Sewerage System).  
मातृ एवं शिशु-विद्यालय, विद्यालयों के स्वस्थवृत्त का निरीक्षण,  
ग्रामसुधार की स्वास्थ्य संबंधी व्यवस्था का निरीक्षण । शीतला  
के टीके का क्रियाभ्यास ।

अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।  
पाठ्य ग्रंथ :—

चरक-संहिता, सुश्रुतसंहिता, अष्टाङ्ग-हृदय, स्वास्थ्य-विज्ञान  
( घाणेकर )

Notter and Firth: Hygiene.

Modi: Elements of Hygiene and Public Health.

Dunn and Pandya: Indian Hygiene and Public  
Health.



## व्यवहारायुर्वेद अगदतन्त्र (JURISPRUDENCE AND TOXICOLOGY).

इसका एक संक्षिप्त अध्ययन-क्रम होगा ।

इसके अतिरिक्त कम से कम १६ मृत्युत्तर परीक्षाओं (Post-Mortem examinations) में उपस्थिति आवश्यक होगी ।

पाठ्य ग्रन्थः—

चरक-संहिता, सुश्रुत-संहिता, अष्टाङ्ग-हृदय ।

Sydney Smith: Forensic Medicine.

Modi: Text-Book of Medical Jurisprudence and Toxicology.

Jagoe Shaw: Hand-book of Mental Diseases.

कौटिल्य अर्थशास्त्र ।

## विकृति-विज्ञान (PATHOLOGY)

( १ ) आयुर्वेदिक विकृति-विज्ञान के सिद्धान्त ।

( २ ) आधुनिक विकृति-विज्ञान के अन्तर्गत कीटाणु-शास्त्र (Bacteriology), जीवाणु-शास्त्र (Parasitology),

क्रियाभ्यासः—

दूषित धातुओं का सूक्ष्म परीक्षण (Morbid Histology), कीटाणु, जीवाणु ।

रोगोत्पादक कृमि (Medical Entomology) एवं दूषित धातुओं में रासायनिक परिवर्तन (Chemical Pathology).

नोटः—सम्पूर्ण पाठ्यक्रम दो वर्षों में समाप्त होगा ।

अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।

पाठ्यग्रन्थः—

चरकसंहिता ।

सुश्रुतसंहिता ।

अष्टाङ्ग-हृदय ।



Boyd: Text-Book of Pathology.

Dible: Pathology.

Green: Pathology.

Manson: Tropical Diseases—Appendix—Medical Zoology.

De and Chatterji: Bacteriology in relation to Clinical Medicine.

Mackey and McCartney: Hand-book of Practical Bacteriology.

आलोच्य ग्रन्थ

जीवाणु विज्ञान ( घाणेकर )

कायचिकित्सा (MEDICINE).

( १ ) निदान एवं चिकित्सा चरक-सुश्रुतानुसार ।

( २ ) आधुनिक निदान एवं चिकित्सा-सिद्धान्त तथा क्रिया-भ्यास का ज्ञान ।

रुग्णशय्या-स्थानीय (Clinical) चिकित्साभ्यास ।

( ३ ) एक प्रमाणित चिकित्सालय ( आयुर्वेदिक ) में ३ वर्ष का चिकित्साभ्यास ।

(क) रुग्णोपचारीय शिक्षा (Clinical Instructions),

(ख) रुग्णोपचार-लेखनाभ्यास (Clinical Clerk).

(ग) रोगियों के दूषित धातु, मलादि का परीक्षण । (Pathological Investigations).

(घ) बहिरंग रोगो-विभाग (Out-door)में उपस्थिति ।

(४) रोगी-परीक्षण (Clinical methods) प्रयोगात्मक शरीर रचना एवं क्रिया-विज्ञान (Applied Medical Anatom and Physiology), शारीरिक लक्षणों की पहचान एवं व्याख्या तथा परीक्षात्मक यन्त्रों का प्रयोग ।

(५) चिकित्सा, व्यवस्थापत्र-लेखन आदि की शिक्षा,, विद्यु-चिकित्सा, रेडियो-चिकित्सा, वेक्सिन, सीरम आदि ।



( ६ ) निम्नांकित आतुरालय-विभागों में शिक्षा-ग्रहणः—

कौमारभृत्य (Diseases of Children).

तीव्र संक्रामक रोग (Acute Infectious Fevers).

राज्यक्षमा (Tuberculosis).

मानसरोग (Mental Diseases).

त्वचागत रोग कुष्ठ आदि (Diseases of Skin, Leprosy).

नोट :—अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।

पाठ्यग्रन्थः—

चरकसंहिता, सुश्रुतसंहिता, अष्टाङ्ग-हृदय, भावप्रकाश,  
माधव-निदान, भैषज्य-रत्नावली, योगरत्नाकर, चक्रदत्त ।

Manson: Tropical Diseases.

Price: A Text-book of Practice of Medicine.

Hutchison and Rainey: Clinical Methods.

Rogers and Megaw: Tropical Medicine.

Osler: Practice of Medicine.

Text-Book of Medicine Beaumont).

आलोच्य ग्रन्थ :—

History of Ayurveda (G. N. Mukhopadhyaya).

English translation of Charak Samhita (Abinash—Chandra).

शल्य (SURGERY).

(१) शल्य सुश्रुतानुसार

(२) आधुनिक शल्य के सिद्धान्त एवं क्रियाभ्यास का ज्ञान ।  
रुग्णशय्यास्थानीय (Clinical) चिकित्साभ्यास ।

(३) एक प्रमाणित चिकित्सालय में ३ वर्ष का चिकित्साभ्यास

(क) वस्त्रोपचारीय शिक्षा (Dressings).

रोगियों के दूषित धातु, मलाद का परीक्षण ।

(Clinical Pathological Investigations).



- ( ४ ) शल्य-साध्य रोगियों का परीक्षण (Surgical Methods).
- ( ५ ) संज्ञानाश की विधियां (Anaesthetics).
- ( ६ ) शल्य शारीरिक (Surgical Anatomy and Physiology).

शव पर शस्त्रकर्माभ्यास (Operative Surgery).

- ( ७ ) निम्नांकित अध्ययनक्रमः—

- ( क ) शल्यकीय विकृति-विज्ञान (Surgical Pathology).
- ( ख ) एक्सरे एवं विद्युच्चिकित्सा
- ( ग ) कर्ण-नासा तथा कंठ के रोग एवं परीक्षण-यन्त्रों का प्रयोग ।

- ( घ ) जननेन्द्रिय संबंधी रोग (Venereal Diseases).

- ( ङ ) दन्तगत शल्य-क्रिया (Dental Surgery).

- ( च ) बहिरंग शल्य विभाग (Surgical Out-door) एवं अस्थिगत बहिरंग रोगी-विभाग (Orthopaedic में उपस्थिति एवं शिक्षा-ग्रहण ।

अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।

पाठ्य-ग्रन्थः—

सौश्रुती, सुश्रुत-संहिता ( उत्तर तन्त्र ) डा. जे. डी. शर्मा

Grey Turner: Modern Operative Surgery.

Romanis and Mitchiner: The Science and Practice of Surgery.

Thomson and Miles: Manual of Surgery.

Waring: Operative Surgery.

Clement E. Shattock: Hand-book of Surgical Diagnosis.

Beasley and Johnson: Surgical Anatomy.

Hamilton Bailey: Physical Signs in Clinical Surgery.

Illingworth and Dick: Text-book of Surgical Pathology.



### आलोच्य ग्रन्थः—

G. Mukerjee: Surgical Instruments of the Hindus.

Boyd: Surgical Pathology.

English Translation of Sushrut—Samhita—  
(Kunj Bihari).

### नेत्र-रोग (OPHTHALMOLOGY).

( १ ) नेत्र-रोग सुश्रुतानुसार ।

( २ ) आधुनिक नेत्ररोग-चिकित्सा के सिद्धान्त एवं क्रिया-  
भ्यास । शय्यास्थानीय व्याख्यान ।

( ३ ) नेत्रविभाग में रुग्णोपचार लेखनाभ्यास ।

दशनात्मक :—

दृष्टि-परीक्षण (Refraction) एवं नेत्र-वीक्षक यन्त्रों का  
प्रयोग । अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।

### पाठ्य ग्रन्थः—

सुश्रुत-संहिता, डा. जे. डी. शर्मा ( उत्तर तन्त्र ) अष्टाङ्ग-हृदय ।

J. H. Parsons: Diseases of the Eye.

May and Worth: Diseases of the Eye.

### आलोच्य ग्रन्थ :—

नेत्र-रोग-विज्ञान ( यादव हंसराज )

### प्रसूति स्त्री-रोग (OBSTETRICS & GYNÆCOLOGY)

( १ ) प्रसूति एवं स्त्री-रोग चरक-सुश्रुतानुसार ।

( २ ) आधुनिक प्रसूति एवं स्त्री-रोग : सिद्धान्तात्मक तथा  
क्रियात्मक ।



- ( ३ ) एक प्रमाणित मातृकालय (Maternity Hospital) में रुग्णोपचार, लेखकाय अनुभव तथा अंतरंग एवं बहिरंग विभाग में स्त्री-रुग्णाओं पर चिकित्साभ्यास ।
- ( ४ ) उपयुक्त समय में छात्रों को निम्नलिखित विषयों का ज्ञान आवश्यक है :—गर्भिणी-परिचर्या; प्रसवोपचार; नवजात शिशु की रक्षा ।
- ( ५ ) प्रसूति एवं स्त्री-रोगों में प्रयुक्त होनेवाले यंत्र-शस्त्रोंका क्रियात्मक प्रदर्शन ।
- ( ६ ) कौमारभृत्य (Pediatrics).
- ( ७ ) गर्भरोधक उपाय (Birth Control).

अध्यापन यथासंभव तुलनात्मक रीति पर होगा ।

पाठ्य ग्रन्थ :—

चरकसंहिता ।

सुश्रुतसंहिता ।

अष्टाङ्ग-हृदय ।

काश्यप-संहिता ( सोमदेव )

Ten Teachers: Gynæcology.

Johnstone: Midwifery:

आलोच्यग्रन्थ :—

प्रसूति-तंत्र ( डा० रामदयाल कपूर )

प्रसूति-तंत्र ( डा० प्रसादीलाल झा )

रसायन—वाजीकरण ।

चरक एवं सुश्रुत-मतानुसार रसायन एवं वाजीकरण की विधियों का सिद्धान्तात्मक एवं क्रियात्मक ज्ञान ।

पाठ्य ग्रन्थ :—

चरक-संहिता ।

सुश्रुत-संहिता ।



## CHAPTER XIII

## THE EXAMINATIONS\*—FACULTY OF LAW.

## A.—ORDINANCES AND REGULATIONS.

## Bachelor of Laws.

1. No candidate shall be admitted to the course of study for the degree of Bachelor of Laws unless he has passed—  
Ordinances.

- (i) the B.A. or B.Sc. (Pass or Honours) examination of the University, or
- (ii) the B. Com. examination of the University as well as the examination in General English prescribed by the University for the B. A. Examination, or
- (iii) the B.A. or B.Sc. examination of any other Indian University† established by an Act of the Legislature for the time being in force, or
- (iv) the B.A. or B.Sc. examination (or examination in Arts or Science higher than these examinations) of the Universities of Oxford, Cambridge, Dublin, London, Birmingham, Durham, Sheffield, Bristol, Wales, Leeds, Liverpool and Reading, and the Victoria University of Manchester, Queen's University of Belfast, and the National University of Ireland, or

\* (1) Students will be given the option to answer the question papers in Law in English and Hindi written in Devanagri script upto the examinations of 1953, but with effect from the examinations of 1954 and onwards, the answers shall be written in Hindi only, the script being Devanagri.

(2) No student in the University shall, in future, be allowed to appear at two Degree examinations of this University in the same year (*vide* Executive Council Resolution No. 16 (6) dated May 10, 1950).

† For the list of approved Universities, see Chapter VII.



(v) the M.A. or B.Sc. examination (or examination in Arts or Science higher than these examinations) of the Universities of Edinburgh, Glasgow, Aberdeen, St Andrews and Harvard, or

(vi) the B. Com. examination of the Universities of Calcutta, Andhra, Allahabad, Nagpur, Madras, East Punjab and Agra.

2. (i) Candidates shall not be admitted to the Final examination or any part of the examination prescribed for the degree of Bachelor of Laws unless they have completed a regular course of study prescribed for the degree and furnished a certificate signed by the Dean of the Faculty that they have attended 75 per cent of the lectures and tutorials in each paper offered by them for the examination and, if resident, have satisfied the condition relating to the residence of students:

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone shortage of attendance to the maximum extent of twenty-one lectures and four tutorials.

(ii) Notwithstanding anything contained in 2 (i), a teacher of the University shall be eligible to appear at any part of the examination prescribed for the degree of Bachelor of Laws without attending lectures and tutorials, if at the time of appearing at the examination he has been in the service of the University for a period of not less than 3 years.

3. A candidate who fails to pass or appear at an examination shall attend not less than 75 per cent of a fresh course of lectures and tutorials during a subsequent full academic year before he is permitted to appear at the examination of that year, provided that a candidate who has completed his course for the examination but



failed to pass, or appear at an examination, may be permitted by the Dean to appear at a subsequent examination without attendance at a fresh course of lectures and tutorials.

Provided further that the above concession to appear at an examination without attendance at a fresh course of lectures and tutorials shall not be given to a candidate after three years from his first failure to pass or appear at an examination.

4. Course of study for the degree of Bachelor of Laws shall extend over two academic years: there shall be a Previous examination at the end of the first academic year and a Final examination at the end of the second academic year. No candidate shall be allowed to appear at the Final examination unless he has passed the Previous examination.

5. For the Previous examination every candidate shall be required to pass in each of the following Papers:—

1. Public International Law\*
2. Legal History.
3. Law of Evidence.
4. Indian Constitutional Law.†
5. Law of Contracts and Specific Relief.
6. Law of Torts and Easements.
7. Law of Partnership and Companies.
8. Law of Agency, Sale of Goods and Negotiable Instruments.

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\*Candidates who have offered Roman Law or Roman Law and Indian Legal History at any examination up to the examination of 1949 and having failed to pass, or appear, at that examination, have been exempted by the Dean under Ordinance 3 relating to the Examinations for the degree of Bachelor of Laws shall have the option to offer themselves for examination in Roman Law and Indian Legal History instead of Public International Law

†Candidates will be required to be familiar with the leading principles of the English Constitutional Law.



6. For the Final examination every candidate shall be required to pass in each of the following Papers:—

1. Equity, Trusts and Transfer of Property.
2. Criminal Law and Procedure.
3. Hindu Law.
4. Mohammadan Law.
5. Civil Procedure, Pleadings and Limitation.
6. Jurisprudence.
- \*7. The Law relating to Land Tenures, Rent and Revenue in the United Provinces of Agra and Oudh.

\*With the approval of the Dean it shall be permissible to a candidate for the degree of Bachelor of Laws after he has passed the Previous examination for that degree to enrol himself for instruction on payment of an additional Tuition fee of Rs. 25 for the session in any two of the subjects mentioned in Paper 7 under Ordinance 6 and also to take examination in both in the same year on payment of an additional Examination fee of Rs. 10. A candidate for admission to the Final Examination for the degree of Bachelor of Laws exempted from attendance under Ordinance 3 at a fresh course of lectures and tutorials may enrol himself for instruction in the Law relating to Land Tenures, Rent and Revenue or Labour Law or Private International Law, or Law of Income-Tax and also take examination in one or two of these subjects. The additional Tuition fee and Examination fee payable by him shall be the same as is payable by a regular student. If a candidate wants to appear at the examination in two of the subjects mentioned in Paper 7 under Ordinance 6, he shall indicate in his application form for the examination the subject, the marks of which are to be computed in the determination of his result for the degree. For the additional subject, the marks of which are not so computed, the candidate will be given a certificate showing that he has passed the examination in that subject on his obtaining 40 per cent marks in that Paper.

A person who has passed the LL.B. Final Examination offering either the Paper on the Law of Land Tenures, Rent and Revenue or the Paper on Labour Law or Private International Law or Law of Income-Tax shall also be eligible to pass an examination in any of the other remaining optional papers after instruction to the satisfaction of the Dean in that paper. The Tuition fee and Examination fee payable by such a person and the conditions for the issue of certificate to such person shall be the same as obtain in such a case with respect to a person who is a candidate for the degree of Bachelor of Laws.

(Continued on next page)



Or  
Labour Law\*  
Or  
Private International Law  
Or  
Law of Income-Tax.

7. Notwithstanding anything contained in Ordinance 2, a person permitted by the Dean under Ordinance 3, to appear at a subsequent examination without attendance at a fresh course of lectures and tutorials shall be eligible to offer himself for examination in all the papers in which he is required to pass for the examination to which he is a candidate for admission.

8. Notwithstanding anything contained in Ordinances 5 and 6 a candidate for the degree of Bachelor of Laws who has passed the Previous Examination with the Paper on Jurisprudence shall not be examined again in that Paper but shall be examined in the Paper on Evidence. The Dean may, in the case of such candidate, dispense with the requirement of Ordinance 2 relating to attendance at lectures and tutorials in that Paper.

9. The examinations for the degree of Bachelor of Laws shall be conducted wholly by means of papers.

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The Tuition fee of Rs. 25 will be payable in three instalments with the regular Tuition fee:—

Rs. 9 with the first instalment of fees.

Rs. 8 with the second instalment of fees.

Rs. 8 with the third instalment of fees.

\*Candidates who have offered Public International Law as Paper 7 or as an option under the Ordinances in force prior to the academic year 1949-50 and having failed to pass or appear have been exempted by the Dean under Ordinance 3, shall continue to have the right to offer themselves for examination in that Paper.



10. In order to pass, a candidate must (*a*) obtain 30 per cent of the marks in each paper, and (*b*) obtain 50 per cent of the total marks obtainable. Those of the successful candidates who obtain 50 per cent and upwards and below 66 per cent of the total marks obtainable shall be placed in the *Second* division and those of the successful candidates who obtain 66 per cent and upwards of the total marks obtainable shall be placed in the *First* division. The names of those who pass in the *First* division shall be arranged in order of merit.

Provided that in determining whether a candidate on the border line should pass, the reports of his class and tutorial work shall be considered by the Results Committee.

### Master of Laws.

1. Every candidate for admission to the Examination for the degree of Master of Laws shall satisfy the following conditions:—

- (*a*) He must have passed the Examination for the degree of Bachelor of Laws of this University or the examination of any other University or institution recognised as equivalent to the degree of Bachelor of Laws of this University.
- (*b*) He must, after passing that Examination, have pursued to the satisfaction of the Dean of the Faculty of Law the course of study prescribed for the degree of Master of Laws.

2. The Examination shall consist of two Parts, Part I and Part II. A candidate shall offer himself for examination in Part I after having pursued the prescribed course of study for not less than one academic year. No candidate shall be eligible for admission to Part II



of the Examination unless he has been declared successful at Part I of the Examination and has thereafter pursued the prescribed course of study for one academic year.

Provided that a person who holds the degree of Master of Laws of the University of Lucknow may, on the recommendation of the Dean, be exempted by the Vice-Chancellor from the requirement relating to Part I of the Examination.

3. (a) Every candidate appearing in Part I of the Examination shall be examined in Jurisprudence and Legal History, each consisting of two papers as follows:—

Jurisprudence: —Paper I.—Analytical and Historical Jurisprudence.

Paper II.—Legislation-Principles, method and interpretation.

Legal History: Paper I.—Legal History of India.

Paper II.—Legal History of England.

(b) Every candidate offering himself for Examination in Part II of the Examination shall be examined in four papers belonging to any *one* of the following groups chosen by him for the purpose:—

Group I. 1. General Principle of Contracts.  
2. Special Contracts.  
3. Company Law and Bankruptcy.  
4. Negotiable Instruments, Insurance and Maritime Law.

Group II. 1. Torts—General Principles.  
2. Torts—Specific Wrongs.  
3. History and Principles of Criminal Law.  
4. Theory of Crime and Punishment.



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- Group III. 1. Sources and History of Hindu Law.  
2. Principles of Hindu Law.  
3. Statute Law in India relating to guardianship, marriage and succession.  
4. Principles of Mohammadan Law.
- Group IV. 1. Sources and History of Mohammadan Law.  
2. Principles of Mohammadan Law.  
3. Statute Law in India relating to guardianship, marriage and succession.  
4. Principles of Hindu Law.
- Group V. 1. English Constitutional Law and History.  
2. Indian Constitutional Law and History.  
3. Constitutional Law of the United States of America and Switzerland.  
4. Federal Systems in the British Commonwealth.
- Group VI. 1. General Principles of the Transfer of Property and History of English Land Law with special reference to the Law of Real Property.  
2. Transfer *inter vivos*, Sales, Mortgages and Leases.  
3. History and Principles of Equity.  
4. Trusts and Charities.
- Group VII. 1. International Relations and International Organisation.  
2. Public International Law.  
3. Private International Law.  
4. Conflict of Laws in India with special reference to the Conflict of personal laws.



4. The Examination shall be conducted *viva voce* and by written papers; provided that a thesis on a topic approved by the Dean in any of the subjects comprised in the group chosen by a candidate for Part II of the examination may be offered in lieu of 2 of the papers. The examination in each paper shall be of three hours duration and shall carry one hundred marks. The *viva voce* examination also shall carry one hundred marks. It will be conducted by three examiners, at least one of whom must be an external examiner.

5. In order to be declared successful at Part I of the Examination a candidate must obtain 40 per cent of the marks in Jurisprudence and Legal History each and in the aggregate 50 per cent of the total marks obtainable. In order to be declared successful at the LL.M. Examination a candidate must obtain 40 per cent of the marks in the *viva voce* examination and in each paper offered by him and in the aggregate 50 per cent of the total marks obtainable.

Provided that any shortage not exceeding five marks in any one Paper shall be excused and the candidate declared to have passed the examination if the total number of marks obtained by him on the aggregate exceeds 50 per cent of the total marks obtainable by at least ten times the number by which he is short of 40 per cent of the marks in that Paper.

6. Divisions shall be awarded on the combined results of the examinations in Part I and Part II. Those of the successful candidates who obtain 50 per cent and upwards and 66 per cent of the total marks obtainable shall be placed in the *Second* division, and those of the successful candidates who obtain 66 per cent and upwards of the total marks obtainable shall be placed in the *First* division.

7. Notwithstanding anything to the contrary contained in Ordinances 1 to 6, a student who has pursued



the course of study prescribed under the Ordinances in force prior to the academic year 1948-49, hereinafter called the old rules, shall be entitled to appear at the LL.M. Examination of 1950 under the old rules.

Provided that a student who has pursued the course of study prescribed under the old rules may at his option appear at Part I of the Examination until the year 1951 without having pursued the prescribed course of study for Part I of the Examination.

### Doctor of Laws (LL.D.)

1. No candidate shall be admitted to the degree of Doctor of Laws of the Lucknow University unless at the time of admission to such degree he is a Master of Laws of not less than three years' standing of the Lucknow University, either by examination or *ad eundum*, or of any University whose degree of Master of Laws is recognised as equivalent to the degree of Master of Laws of the Lucknow University or for reasons of his contribution to legal studies, or of professional, judicial or academic distinction, has been permitted by the Academic Council, on the recommendation of the Faculty of Law, to enter upon a course of study for the degree of Doctor of Laws.

2. Application for permission to enter upon a course of study for the degree of Doctor of Laws may be made at the commencement of any University term. The subject chosen for investigation must relate to some branch of Law or the history or philosophy of Law and should have the approval of the Faculty of Law.

3. Before a candidate is permitted to supplicate for the degree of Doctor of Laws he must be certified



by the Dean to have been engaged in research work in the University for not less than two academic sessions or six terms. The time spent, with the permission of the Dean, by a candidate outside Lucknow for the purpose of collecting material for the thesis shall be included in computing the period of two academic sessions or six terms as prescribed by this Ordinance, provided the time so spent shall not extend over more than three terms nor include the first and the sixth terms.

4. A candidate who has taken the LL. M. degree of the Lucknow University may be exempted from the requirement under the foregoing Ordinance by the permission of the Dean, but shall not on that account be entitled to any remission in the fees payable by him as a research student.

5. Teachers and Research Assistants\* of the University who hold the degree of Master of Laws of this University by examination or *ad eundum* or a degree recognised as equivalent to the LL.M. degree of this University may be permitted by the Faculty to present a thesis for the degree of Doctor of Laws after three years' service in the University. The Registrar shall be notified by such Teacher or Research Assistant at least six months before the date on which he proposes to present his thesis.

6. A candidate for the degree of Doctor of Laws must submit three printed or type-written copies of a thesis composed by him, accompanied by the prescribed fee. It will be open to such candidate to present in support of his candidature other papers of which also three copies should be submitted. He shall also submit an

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\* "Research Assistant" means a person assisting a teacher in his research work and recognised by the Executive Council as such.



abstract of about 1,000 words of his thesis and indicate fully and clearly in a prefatory note the portion of the thesis claimed by him as original and the extent to which he is indebted for any portion to another person.

7. A thesis which has already been presented for another degree will not again be accepted for the degree of Doctor of Laws but it may be wholly or partly included in an extended investigation, provided that the part so included be clearly indicated. The thesis shall embody a definite contribution to knowledge.

8. If the examiners consider the thesis and the papers, if any, to be of sufficient merit they may recommend that the candidate should receive the degree without further examination, or they may require him to undergo an examination which may be written or oral or both, on the subject of his thesis.

9. The report of examiners shall be laid before the Results Committee. If the Committee is satisfied that the reports of the examiners are unanimous and definite they may recommend to the Executive Council that the result be published. If, however, the reports show a divergence of opinion between the examiners, the Committee may direct that the reports be exchanged between them, the examiners being requested to submit a joint report, if possible. The Committee may, at its discretion and shall, if the reports are conflicting even after an exchange of views, refer the thesis to another external examiner.

10. A candidate shall not be admitted to the degree of Doctor of Laws unless his thesis has been published and at least six copies of the same have been deposited with the University Library. The Faculty of Law may



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grant exemption from this requirement relating to publication. If such an exemption is granted by the Faculty a portion or epitome of the thesis, as the Vice-Chancellor in consultation with the Dean of the Faculty of Law may approve, must be published or accepted for publication in a recognised journal or be published in his own name privately by the candidate before the candidate can be admitted to the degree of Doctor of Laws. Every thesis, portion or epitome so published shall sufficiently indicate that the work was submitted in fulfilment of the requirements for the degree of Doctor of Laws of the Lucknow University.

### Doctor of Laws (Honoris Causa).

The degree of Doctor of Laws may be conferred as an Honorary degree in accordance with the provisions of Statute 14, upon any person, on the ground that he is, by reason of eminent position and attainments or by virtue of his contributions to the cause of learning, a fit and proper person to receive such a degree.

Ordinance.

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*B—SCHEME OF EXAMINATION.*

## Bachelor of Laws.

## PREVIOUS OR FINAL.

	Marks.
Each Paper ....	100
Minimum pass marks of each Paper ....	30
Minimum aggregate pass marks ....	50 per cent
<i>First</i> division .... 66 per cent	} of the aggregate marks.
<i>Second</i> division .... 50 per cent	

*Time allowed for each Paper—3 hours.*

## Master of Laws.

## PART I.

	Marks.
Each Paper in each subject ....	100
Minimum pass marks in each subject ....	40 per cent
Minimum aggregate pass marks ....	50 per cent

*Time allowed for each Paper—3 hours.*

## PART II.

	Marks.
Each Paper ....	100
Thesis in lieu of two Papers ....	200
<i>Viva Voce</i> ....	100
Minimum pass marks in Thesis or each Paper ....	40 per cent
Minimum pass marks in <i>Viva Voce</i> ....	40 per cent
Minimum aggregate pass marks ....	50 per cent
<i>First</i> division .... 66 per cent	} of the aggregate marks of the combined results of Parts I and II.
<i>Second</i> division .... 50 per cent	

*Time allowed for each Paper—3 hours.*



### C.—COURSES OF STUDY.

#### LL. B. Previous.

The following Acts are prescribed and the following books are recommended:—

(1) *Public International Law.*

Fenwick: *International Law.*

Oppenheim's *International Law*, Vols. 1 and 2 by Lauterpacht.

Pitt Cobbett's *Cases on International Law*, Vols. 1 and 2 by Walker.

(2) *Legal History.*

Cowell's *History of the Courts and Legislative Authorities in India*, pages 1 to 64 and 149 to 273.

Windeyer: *Lectures on Legal History.*

Potter's *Historical Introduction to English Law.*

(3) *Law of Evidence.*

The Evidence Act (Act I of 1872).

Stephen's *Introduction to the Indian Evidence Act.*

(4) *Indian Constitutional Law.*

The Constitution of India.

(5) *Law of Contracts and Specific Relief.*

Anson's *Principles of the English Law of Contracts*, The Indian Contract Act, No. IX 1872, and Pollock and Mulla's *Indian Contract Act* (Student's Edition.)

The Specific Relief Act No. 1 of 1877.

(6) *Law of Torts and Easements.*

Winfield's *Text Book of the Law of Torts.*

The Indian Easements Act No. V of 1882.

Mitra's *Lectures on Easements.*



(7) *Law of Partnership and Companies.*

Palmer: Company Law.

Indian Companies Act.

Pollock and Mulla: Indian Partnership Act.

(8) *Law of Agency, Sale of Goods and Negotiable Instruments.*

Indian Contract Act, Chapter X.

Indian Sale of Goods Act.

Indian Negotiable Instruments Act.

Davar's Mercantile Law.

Chorley's and Tucker's Cases on Mercantile Law.

(Note.—Every Act in the above list means the Act with all subsequent amendments thereof).

The following leading cases are recommended for study:—

(1) *Public International Law.*

Paquete Habana (1899) 175 U. S. 677.

The Charkieh (1873) L. R. 4 A. and E. 49 (120).

Migheil v. Sultan of Johore (1894) I. Q. B. 153.

U. S. A. v. McRae (1869) L. R. 8 Eq. 59.

West Rand Central Gold Mining Co., Ltd., v. Rex.  
(1905) 2 K. B. 391.

Cook v. Sprigg (1899) A. C. 572.

Miangas (or Palmas) Island Award: Award No. 18  
Permanent Court of Arbitration at the Hague.

The Direct United States Cable Co. v. Anglo-American Telegraph Co. (1877) 2 App. Cases 394.

Duff Development Co. v. Govt. of Kalantan (1924)  
A. C. 707.



The Ionian Ships (1855) 2 Spinks 212.

Pitt Cobbett *v.* 1, p. 42;

Luther *v.* Sagor (1921) 3 K. B. 532 C. A.

Corfu Channel Case, I. C. J. Reports of Judgments, Advisory Opinions and Orders, 1949.

Parlement Belge (1880) 5 P. D. 197.

Wildenbus case (1886) 120 U. S. I.

S. S. Wimbeldon, P. C. I. J., Series A. No. 23 at page 26.

Rex. *v.* Godfrey (1923) 1 K. B. 24.

The Lotus case (1927) P. C. I. J., Series A. No. 10.

The Appam 243 U. S. 124.

The Bermuda 3 Wall 515.

The Peterhoff 5 Wall 18.

## (2) *Legal History.*

*In re*: Justices of the Supreme Court of Judicature, Bombay—1 Knapp 1; 12 E. R. 222.

Ryots of Garabandho *v.* Zamindar of Parlakimedi—70 I. A. 129; (1943) 2 M. L. J. 254 P. C.; A. I. R. (1943) P. C. 164; 48 C. W. N. 18; (1943) 2 M. L. J. 254 P. C.

C. P. Mathen *v.* District Magistrate, Trivandrum, 66 I. A. 222; A. I. R. 1939 P. C. 213.

Mayor of Lyons *v.* East India Co., 1 Moore I. A. 272.

Gopi Krishna Gosain *v.* Ganga Prasad Gosain—6 Moore I. A. 53.

## (3) *Law of Evidence.*

Muhammad Sharif *v.* Bande Ali, I. L. R. 34 All. 36.

Queen Empress *v.* Abdullah, I. L. R. 7 All. 385.



R. V. Lillyman, L. R. (1896) 2 Q. B. 167.

R. V. Christie, L. R. (1914) A. C. 545.

R. V. Jenkins, 11 Cox Cases, 250.

Bhogi Lal v. Royal Insurance Company, 47, C. L. J., 550.

Palukuri Kottaya v. R.; A. I. R. 1947, P. C. 67.

Pakla Narayan Swamy v. R. 66 I. A. 66.

Sarat Chandra Dey v. Gopal Chandra Laha, I. L. R. 20 Cal. 296.

Mercantile Bank of India Ltd. v. Central Bank of India Ltd. (1937) 65, I. A. 75.

Mirza Akbar v. King Emperor, A. I. R. 1940, P. C. 176.

(4) *Indian Constitutional Law.*

Secretary of State for India-in-Council v. Krmachee Boyee Saheba, (1886) 7 M. I. A. 476.

P. and O. Steam Navigation Co. v. Secretary of State for India-in-Council, 5 Bom. H.C. App. 1.

Prafulla Kumar Mukharjee and others v. Bank of Commerce, Khulna, 74 I. A. 23; A. I. R. 1947, P. C. 60; 1947 A. L. J. 305; 230 I. C. 337; 1947 F. L. J. 34.

A. K. Gopalan v. State of Madras (A. I. R.) 1950 S. C. 23.

G. G. in Council v. Province of Madras, (1945) P. L. J. 69; A. I. R. (1945) P. C. 98.

Eshugbayi Eleko v. Officer Administering the Government of Nigeria, (1928) A. C. 459; (1931) A. C. 662.

(5) *Law of Contracts and Specific Relief.*

Carlil v. Carbolic Smoke Ball Co., (1893) I. Q. B. 256.



Shadwell *v.* Shadwell, 9 C. B., N. S. 159.

Leslie *v.* Sheill, L. R. (1914) 3 K. B. 604.

Faridunnisa *v.* Mukhtar Ahmad, 52 I. A. 342.

Hadley *v.* Baxendale, 1854 9, Ex. 354.

Jamal *v.* Moola Dawood Sons & Co., 43 I. A. 6.

Bell *v.* Lever Brothers, Ltd. (1932) A. C. 161.

Ajudhia Prasad *v.* Chandanlal, A. I. R. 1937 All. 610.

Raghu Nath Prasad *v.* Surja Prasad, A. I. R. 1924 P. C. 60.

United Motor Finance Co., *v.* Addison & Co., Ltd., A. I. R. 1937 P. C. 21.

Shri Shiba Prasad Singh *v.* Maharaja Sirish Chandra Nandi, A. I. R. 1949, P. C. 297.

Nordenfelt *v.* Maxim Nordenfelt Guns and Ammunition Co., Ltd., (1894) A. C. 535.

Bhola Nath Shanker Das *v.* Luxmi Narain, A. I. R. 1931 All. 83.

Hochster *v.* De La Tour, (1853) 118 E. R. 922.

Nannier *v.* Rayulu Iyer & Co., A. I. R. 1926 Mad. 778.

Cricklewood Property and Investment Trust Ltd., *v.* Leighton's Investment Trust Ltd., (1945) A.C. 221.

Kesri Chand *v.* G. G., I. L. R. 1949 Nag. 720.

(6) *Law of Torts.*

Read *v.* Lyons & Co., Ltd., (1947) A. C. 156.

Bourhill (Hay) *v.* Young, (1943) A. C. 92.

Haynes *v.* Harwood & Son, L. R. (1935) 1 K. B. 146.



St. Helen's Smelting Co. v. Tipping, (1865) 11 H. L. C. 642.

Sedleigh-Denfield v. St. Joseph's Society for Foreign Missions, L. R. (1940) A. C. 880.

Century Insurance Co. v. Northern Ireland Transport Board, (1942) A. C. 509.

Mohamed Amin v. Jogendra Kumar Banerjee, (1946) 74 I. A. 193.

Subbiha Reddy v. Jordon, (1944) 72 I. A. 206.

Lumley v. Gye, (118) E. R. 749.

Parvathi v. Mannar, 8 Mad. 175.

*In re*: Polemis and Furness, Withy & Co. (1921) 3 K. B. 560.

Hulton & Co. v. Jones, (1910) A. C. 20.

Abrath v. N. E. Rly. Co., (1883), 11 Q. B. D. 79.

Rylands v. Fletcher, (1868) L. R. 3 H. L. 330.

Donoghue v. Stevenson, (1932) A. C. 562.

Hollins v. Fowler, (1875) L. R. 7 H. L. 757.

Honeywill & Stein Ltd. v. Larkin Bros., (1934) I. K. B. 191.

Addie & Sons Ltd. v. Dumbreck, (1929) A. C. 385.

Reddaway v. Banham, 1896 A. C. 199.

Crofter Harris Tweed Co. v. Veith, (1942) 1 All. E. R. 142.

Benham v. Gambling, (1941) 1 All. E. R. 7.

(7) *Law of Partnership and Companies.*

Trego v. Hunt, (1896) A. C. 7.

Cox v. Hickman, (1860) 8 H. L. C. 268.

Mollow March & Co., v. Court of Wards (1872) L. R. 4 P. C. 419.



Ashbury Carriage Co., Ltd., *v.* Riche (1875) L. R. 7 H. L. 653.

*In re*: City Equitable Fire Insurance Co., Ltd., (1925) Ch. 407.

Derry *v.* Peek, (1889) 14 A. C. 337.

Lee *v.* Neuchatel Asphalte Co., (1889) 41 Ch. D. 1.

Royal British Bank *v.* Turquand, 24 L. J. Q. B. 1129.

Salomon *v.* Salomon & Co., (1897) A. C. 22.

(8) *Law of Agency, Sale of Goods and Negotiable Instruments.*

De Bussche *v.* Alt., (1878) 8 Ch. D. 236.

Llyod *v.* Grace Smith & Co., 1912, A. C. 716.

Dovey *v.* Cory, (1901) A. C. 477.

Girdhari Lal *v.* Crawford, (1885) 9 All. 147.

Keighly, Maxted & Co. *v.* Durent, (1901) A. C. 240.

Kursell *v.* Timber Operators, (1927) 1 K. B. 298.

Johns *v.* Just, (1868) L. R. 3 Q. B. 197.

Grant *v.* Australian Knitting Mills Ltd., (1936) P. C. 34.

Behn *v.* Burness, (1863) 32 L. J., Q. B. 204.

Niblett *v.* Confectioners Materials Ltd., (1921) K. B. 387 C. A.

Miller *v.* Race, 97 E. R. 398.

**Final Examination in Law.**

The following Acts are prescribed and the following books are recommended:—

(1) *Equity, Trusts and Transfer of Property.*

The Transfer of Property Act No. IV of 1882.

Sir Lal Gopal Mukerjee's Law of Transfer.



(2) *Criminal Law and Procedure.*

Indian Penal Code, Act XLV of 1860, (Candidates will not be required to have a knowledge of the amount of punishment which can be inflicted for an offence).

Shams-ul-Huda: The Principle of the Law of Crime in British India (T. L. L. 1902).

The Code of Criminal Procedure, Act No. 5 of 1898 (except Schedules I and II.)

(3) *Hindu Law.*

Mulla's Hindu Law.

(4) *Mohammadan Law.*

Wilson's Digest of Mohammadan Law from the beginning of Part II to the end of the book.

(5) *Civil Procedure, Pleading and Limitation.*

Civil Procedure Code, Act V of 1908. Edited by Mulla (Student's Edition.)

Moga's Law of Pleadings in British India.

The Indian Limitation Act (Act IX of 1908, excluding the Schedules.)

(6) *Jurisprudence.*

Salmond's Jurisprudence.

(7) *Land Tenures, Rent and Revenue.*

Act No. III of 1901 (United Provinces).

U. P. Act No. 1 of 1951.

Or

*Labour Law.*

Or

*Private International Law.*

Schmitthoff: Conflict of Laws.



Or

*Law of Income Tax.*

Sundaram: Law of Income-Tax in India.

(Note.—Every Act in the above list means the Act with all subsequent amendments thereof.)

The following leading cases are recommended for study:—

*Transfer of Property.*

Ram Coomar v. Macqueen, 11 Bengal L. R. 46.

Ariff v. Jadunath, 58 I. A. 91.

Gokul Das v. Puranmal, 11 I. A. 126.

Matireddi Ayyareddi v. Gopal Krishnayya, 51 I. A. 140.

Kregilinger v. New Patagonia Meat and Cold Storage Company Ltd., (1914) A. C. 25.

Probodh Kumar Das and others v. Dantmara Tea Co., Ltd. and others, A. I. R. 1940, P. C. 1.

London and South Western Railway v. Gomm. 20 Ch. D. 562.

Kampta Singh and others v. Chaturbhuj Singh, 61 I. A. 185.

Sopher and another v. Administrator-General of Bengal and another, 71 I. A. 93.

Blackwell v. Blackwell, (1929) A. C. 318.

Hazur Ara Begam v. Deputy Commissioner, Gonda, (1941), O. W. N. 906.

*Criminal Law.*

Reg. v. Tolson, L. R. 23 Q. B. D. 168.



- Reg. v. Prince, L. R. 2 C. C. R. 154.  
Reg. v. McNaughten, 10 C. I. & F. 200.  
Emperor v. Nazir Ahmed, 71 I. A., 203.  
Reg. v. Beard, (1910), A. C. 479.  
Reg. v. Dudley, L. R. 14 Q. B. D. 273.  
Mahbut Shah v. Emperor, 72 I. A. 148.  
Barendar Kumar Ghosh v. K. E., (1924) 52 I. A. 41  
K. A. Dharmasena v. The King, 51 Cr. L. J. 1597.  
Pritam Singh v. The State, 51 Cr. L. J. 1270.  
Kapildeo Singh v. The King, (S. 141 etc.) 51 Cr.  
L. J. 1057.  
R. V. Govinda (1876) 1 Bom. 342.  
Mancini v. The Director of Public Prosecutions,  
(1942) A. C. p. 1.  
Prabhoo v. Emperor, A. I. R. 1941, All. 402.

*Hindu Law.*

- Hunnooman Prasad Pandey v. Babooee Munraj  
Koonwaree, 6 M. I. A. 393.  
Brij Narain v. Mangla Prasad, 51 I. A. 129.  
Buddha Singh v. Laltu Singh, 42 I. A. 206.  
Mohammad Husain Khan v. Babu Keshva Nandan  
Sahai, 64 I. A. 250.  
Veddachalla v. Subramania, 44 Mad. 753.  
Sheo Shankar Lal v. Debi Sahai, 25 All. 468.  
Jitendra Nath Roy, v. Nagendra Nath Roy, 28 I. A.  
372.  
Amarendra Man Singh v. Sanatan Singh, 60 I. A.  
242.  
Anant Bhikappa v. Shankar Ram Chandra, A. I. R.  
1943, P. C. 196.



*Mohammadan Law.*

Abraham *v.* Roshan Jehan, 9 M. I. A. 199.

Khajooronisa *v.* Roshan Jehan, 3 I. A. 191.

Mohammad *v.* Fakhr Jahan, 49 I. A. 195.

Amjad Khan *v.* Ashraf Khan, 66 I. A. 213.

Rahiman *v.* Bakridan, (1936) O. W. N. 155.

Mohammad Mumtaj *v.* Zubeida Jan, 16 I. A. 205.

Moorice *v.* The Bishop of Durham, (1804) 10 Ves  
522.

Abdul Pata Mohammad *v.* Rasamayu, 22 I. A. 76.

Maina Bibi *v.* Ch. Vakil, 52 I. A. 145.

Munshi Fazlur Raman *v.* Latifun Nisa, 8 M. I. A.  
379.

Umar Bibi *v.* Mohammad Din, (1945) A.I.R. Lahore,  
51.

Mohammad Ali Khan *v.* Ahmad Ali Khan. 1945, All.  
261 F. B.

Rohasa Khanum *v.* Khodadad Bomanj, Irani, 48,  
Bom. L. R. 864.

Ghulam Husain Sajan *v.* Fakir Mohammad Sajan, 48  
Bom. L. R. 733.

*Private International Law.*

Udny *v.* Udny, (1869) L. R., 1 Sc. App. 441.

Atty. Gen. for Alberta *v.* Cook, (1926) A. C. 444.

Salvesen *v.* Administrator of Austrian Property  
(1927) A. C. 641.



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Sirdar Gurdayal Singh *v.* Rajah of Faridkote, (1894)  
A. C. 670.

Chetti *v.* Chetti, (1909), P. 67.

Phillips *v.* Eyre, (1870), L. R. 6 Q. B. 1.

Chormal Balcand *v.* Kasturi Chand Seraoji, A. I. R.  
1938, Cal. 511.

Nur Jehan Begam *v.* Eugene Tiscenko, A. I. R. 1942  
Cal. 325.

Srinivasan 9, *v.* Srinivasan, (1945) 2 All. E. R. 21.

De Reneville *v.* De Reneville, (1948) 64 T. L. R. 82  
(1948) P. 100 C. A.

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## CHAPTER XIV.

## THE EXAMINATIONS\*—FACULTY OF COMMERCE.

## I.—General.

1. The Intermediate Examination in Commerce of the Board of High School and Intermediate Education, U. P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior, and the Intermediate Examination in Group E of the Board of Intermediate and Secondary Education, Dacca, shall be regarded as equivalent to the Intermediate Examination of an Indian University for purpose of admission to the B.Com. degree courses of the University.

2. No candidate shall be admitted to the courses of study for the degree of Bachelor of Commerce unless:—

- (i) he has passed the Intermediate Examination in Commerce of the Board of High School and Intermediate Education, U.P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior, or of the Nagpur University, or of the Patna University; or

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\* (1) Teaching in the B.Com. classes has been started in Hindi and Urdu from the Session 1946-47. For the next four years (*viz.*, for the examinations of 1950, 1951, 1952 and 1953 only) question-papers in B.Com. Examinations will be set in Hindi followed by an English rendering and the language in which the candidates are to write the answers be either Hindi or English or a combination of both and that thereafter question-papers will be set in Hindi only and the answers be written in Hindi only.

(2) No student in the University shall, in future, be allowed to appear at two Degree examinations of this University in the same year (*vide* Executive Council Resolution No. 16(6) dated May 10, 1950).



- (ii) he has passed the Commercial Diploma Examination of the Punjab University; or of the Education Department of Delhi, Ajmer-Merwara and Central India, or
- (iii) he has passed the Intermediate Examination in Arts (Group B—Special) of the Delhi University or in Commerce under the Faculty of Arts of the Banaras Hindu University, or in Commerce of the Aligarh Muslim University, or in Commerce of the Rajputana University, or in Arts (with Economics) or in Commerce of the Utkal University.
- (iv) he has passed the Intermediate Examination in Group E of the Board of Intermediate and Secondary Education, Dacca; or
- (v) he has passed the Intermediate Examination of the Andhra University in three Commercial subjects, *viz.*, Accountancy, Banking and Economic Geography or Mathematics; or
- (vi) he has passed the Intermediate Examination of the Calcutta University with Accountancy and one other Commercial subject; or
- (vii) he has passed the Intermediate Examination in Arts of the Madras University with Accountancy and one other Commercial subject; or
- \*(viii) he has passed the Intermediate Examination or the B.A. Examination of any recognised University, or the Intermediate

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\*Attention is drawn to Ordinance 11 at page 698 of the Prospectus for 1951-52.



Examination of the Board of High School and Intermediate Education, U. P., or of the Board of High School and Intermediate Education, Rajputana (including Ajmer-Merwara), Central India and Gwalior, or of the Board of Intermediate and Secondary Education, Dacca, or of the Jammu and Kashmir University, or the Examination conducted by the Board of Secondary Education, United States of Madhya Bharat, with Economics as one of his subjects, provided on joining the Commerce Faculty of the University he takes up Banking or Actuarial Mathematics for both the B.Com. Previous and Final Examinations; or

(ix) he has passed Part I of the Associate Examination of the Indian Institute of Bankers after passing the Intermediate Examination of the Board of High School and Intermediate Education, U. P., or of the Board of High School and Intermediate Education, Rajputana (Including Ajmer-Merwara), Central India and Gwalior, or of the Board of Intermediate and Secondary Education, Dacca, or the Intermediate Examination of an Indian University established by an Act of the Legislature; or

(x) he has passed the All-India Senior Diploma Examination in Commerce, conducted by the All-India Board of Commercial Studies, Delhi.

3. Part-time students, *viz.*, those who wish to take two years to complete a course ordinarily prescribed for one year of the degree of B.Com. shall be allowed to do so.



## II.—B.Com. Examination.

### A.—ORDINANCES AND REGULATIONS.

1. Candidates shall not be admitted to the Final Examination or any part of the examination Ordinances. prescribed for the degree of Bachelor of Commerce unless they have—

- (i) completed a regular course of study as prescribed for that degree and furnished a certificate signed by the Dean of the Faculty that they have attended 75 per cent of the University lectures and tutorials (counted separately) in each subject offered by them for the examination:

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone a shortage of attendance to the maximum extent of 15 meetings in each Section, provided that the shortage in tutorials does not exceed six, and

- (ii) fulfilled the conditions laid down for the residence of students.

2. A candidate who has completed the required percentage of attendance fails to appear or pass an examination may be permitted to appear or re-appear at the same examination in a subsequent year without further attendance at lectures and tutorial, provided that his application for permission to appear meets with the approval of the Dean, Faculty of Commerce. Such permission shall not be given in the case of subjects involving any practical work.



3. If a student gets at least 25 per cent marks in one Section and 40 per cent marks in each of the others he may be allowed to appear in the following July in the Section in which he failed, without further attendance at lectures, and, if successful, shall be declared to have passed the examination without being placed in any division.

4. Permission to appear in Special Accountancy at the supplementary examination may be granted also to students who have passed the examination for the B.Com. degree but have failed in Special Test in Accountancy.

5. A graduate in Commerce of this University after having passed with a special subject may be permitted to appear in any other special subject (Advanced Accounting and Auditing, Advanced Banking, Actuarial Science) in the B.Com. Final examination, provided he takes both the Previous and Final Papers in that subject (*i.e.*, 1 paper in the Previous and 2 papers in the Final) without attending lectures, and if successful, be granted a Certificate to that effect. Such students will be required to pay an Examination fee of Rs. 15.

5. Students who have taken the B.Com. degree of this University may, after pursuing a prescribed course of study, be permitted to appear in any one of the papers prescribed for the B.Com. Final examination and not taken by them at a previous degree examination and, if successful, be granted a Certificate to that effect.

Such students will be required to pay an Examination fee of Rs. 15 and two thirds of the Tuition fees shall be charged from students who are eligible to appear in any one of the papers for the B.Com. degree under this Ordinance.

6. Courses of study for the degree of Bachelor of Commerce shall, subject to the exceptions noted in Ordi-



nance 3 under “I—General” above, ordinarily extend over two academic years; there shall be a Previous Examination at the end of the first academic year and a Final Examination at the end of the second academic year. No candidate shall be allowed to appear at the Final Examination unless he has passed the Previous Examination.

7. In the Previous Examination, every candidate shall be required to pass in the following three Sections:—

- (I) (i) Accounting,  
                   *or*  
                   Banking,  
                   *or*  
                   Actuarial Mathematics.
- (ii) Transport.
- (II) (i) Business Organisation.
- (ii) Indian Industries and Resources.
- (III) (i) Economics.
- (ii) Co-operative Organisation and Finance,  
                   *or*  
                   Insurance.

8. In the Final Examination, every candidate shall be required to pass in the following four Sections:—

- (I) Advanced Accounting and Auditing,  
                   *or*  
                   Elements of Actuarial Science,  
                   *or*  
                   Advanced Banking.



II(a) (i) Trade of India.

(ii) Transport or Economic History,

or

Marketing Practice and Finance.

or (b) (i) Geography—One Paper.

(ii) Geography—Practical.

\*or (c) (i) Military Science—One Paper.

(ii) Military Science—Practical.

(III) (i) Statistics.

(ii) Public Finance.

(IV) (i) Mercantile and Industrial Law.

(ii) Secretarial Practice and Company Law.

9. Both the Previous and the Final examinations for the degree of Bachelor of Commerce shall be conducted wholly by means of papers.

10. Candidates for the B.Com. degree shall be required to pass the examination in General English of the B.A. standard unless they have taken English as one of their subjects of the B.A. degree.

(Note :—This applies to all candidates joining or re-joining the B.Com. Previous class after 1926.)

11. Candidates who are admitted to the Faculty of Commerce after passing the Intermediate Examination or the B.A. Examination shall not be eligible to receive the B.Com. degree until they have passed in a paper on Accounting of the Intermediate in Commerce standard. In respect of the examination in this paper on Accounting, the following conditions are laid down:—

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\*Only such candidates will be allowed to take Military Science for the B.Com. Final examination as have failed in the B.Com. Final examination in Military Science.



- (a) Permission to appear in the examination will not be granted unless the candidates have attended 75 per cent of the lectures and tutorials for this paper. Such attendance shall not be required for more than two academic years.
- (b) The candidates may sit for the examination in this paper on Accounting in any year.
- (c) The marks obtained in this paper shall not count for division in the B.Com. Previous or Final examinations.

12. Names of successful candidates shall be arranged in three divisions. Candidates who obtain 60 per cent and upwards of the aggregate marks shall be placed in the *First* division. Candidates who obtain 48 per cent and upwards of the aggregate marks shall be placed in the *Second* division. Candidates who obtain 36 per cent and upwards of the aggregate marks shall be placed in the *Third* division. Names of successful candidates shall be classified in three divisions and arranged in order of merit within the First division and in alphabetical order within the Second and Third divisions.

13. In order to pass, candidates must obtain 33 per cent of the total marks in each Section.

14. A candidate for the B.Com. Final class will not be allowed to take up Advanced Accounting or Actuarial Science or Advanced Banking unless he has passed in the Previous Examination in Accounting or Actuarial Mathematics or Banking respectively.

Regulation. Students of the Previous and Final classes will not be permitted to proceed to their respective University examinations if the Dean of the Faculty considers their conduct or tutorial and terminal examination records to be unsatisfactory.



### Master of Commerce.

1. The degree of Master of Commerce shall be conferred on Graduates in Commerce who have pursued a regular course of study in the University for not less than two academic years since taking their Bachelor's Degree in Commerce and have fulfilled the conditions laid down for the residence of students and have passed the prescribed examination.
2. Admission to the M.Com. course shall be restricted to B.Coms. of Lucknow University, or of the Allahabad University, or of the Agra University, or of the Calcutta University, or of the Punjab University, or of the Banaras Hindu University, or of the Nagpur University, or of the Madras University.
3. The examination shall consist of two Parts: Parts I and II.
4. A student after completing a regular course of study for not less than one academic year shall be admitted to the M.Com. Part I Examination of that year.
5. The M.Com. Part II Examination shall be open to all students who have since passing Part I Examination prosecuted a regular course of study for not less than one academic year, subject to the provisions of Ordinance No. 1 under "Examinations—Miscellaneous".
6. Division shall be awarded on the combined results of the examinations in Parts I and II.
7. The examination for the degree of Master of Commerce shall be by means of papers, provided that a thesis may be offered in lieu of one of the papers in M.Com. Part II Examination with the approval of the Head of the Department.



Candidates shall also be required to undergo a *Viva Voce* Test in the M. Com. Part II Examination.

The M.Com. Examination will consist of the following papers:—

### *PART I.*

1. Accounting Problems and Practice or Advanced Actuarial Practice or Banking Problems and Practice.
2. Any *three* papers of the following:—
  - (i) Economic Thought and Business Economics.
  - (ii) Advanced Transport.
  - (iii) Labour Management and Industrial Relations.
  - (iv) Applied Statistics.
  - (v) International Trade and Foreign Exchange.

### *PART II.*

Any *four* papers of the following:—

- (i) Commercial Development and Industrial Organisation from 1800 to 1939.
- (ii) Organisation and Finance of Major Industries in India.
- (iii) Organisation, Finance and Regulation of International Commerce.
- (iv) Business Administration.
- (v) Advanced Economic Theory and Analysis.

8. Names of successful candidates shall be arranged in three divisions:—

- (i) *First* division, candidates obtaining 60 per cent and over of the aggregate marks.



(ii) *Second* division, candidates obtaining below 60 per cent but not less than 48 per cent of the aggregate marks.

(iii) *Third* division, candidates obtaining below 48 per cent but not less than 36 per cent of the aggregate marks.

The names of those who pass in the *First* division shall be arranged in order of merit and of those who pass in the *Second* and *Third* divisions in alphabetical order.

9. No candidate shall be declared to have passed in either Part of the M.Com. Examination if he has obtained less than 30 per cent in more than one paper (Thesis and *Viva Voce* Test shall count as one paper for this purpose).

10. Each Paper shall be of three hours' duration. Candidates must obtain 36 per cent of the total marks for passing in either Part.

11. In M.Com. Part I and Part II Examinations each paper shall carry 100 marks and the Thesis shall carry 100 marks. The *Viva Voce* shall carry 100 marks.

12. A 'regular course of study' means attendance at not less than 75 per cent of the lectures constituting the course of study in a particular subject.

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor, may, on the recommendation of the Dean, condone shortage of attendance to the maximum extent of twenty-five lectures in each Part.

13. The scope of the subject shall be indicated in the syllabus.



\*14. A teacher in Commercial subjects who has taken the B.Com. degree† of the University may be permitted by the Academic Council to appear privately at Part I of the M.Com. Examination not less than five years after graduation, provided that he is either:—

(a) a teacher of the University, or

(b) a whole-time teacher in Commercial subjects giving not less than 12 hours instruction per week who has been regularly employed for a period of at least 18 months in a school or college, situated within the territorial jurisdiction of the University and recognised by the University for the purpose.

Part II of the examination shall be open‡ to teachers who have passed the Part I examination, provided they have been teaching continuously in a recognised educational institution situated within the territorial jurisdiction of the University during the intervening period.

15. Students who have taken the M.Com. degree of this University may, after pursuing a prescribed course of study, be permitted to appear in any of the papers prescribed for the M.Com. Final examination and not taken by them at a Previous Degree examination and, if successful, be granted a Certificate to that effect.

Such students will be required to pay an Examination fee of Rs. 15 and two-thirds of the Tuition fees shall be charged from students who are eligible to appear in any one of the papers for the M.Com. degree under this Ordinance.

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\*Application forms of teacher candidates for the examination will be accepted if they are countersigned by the Educational Authorities.

‡Permission to appear as a teacher will be subject to the general condition that only those options are offered in any particular year for which question-papers are being set for regular students,



The following Regulations are made regarding the procedure to be followed in connection with the Thesis in M.Com. Part II Examination:—

Regulations. 1. Every candidate presenting a Thesis in lieu of one paper for M.Com. Part II Examination shall declare by the 1st week of the second term the topic on which he intends to submit his Thesis.

2. Permission to change the Thesis for a paper or the subject of the Thesis shall not be granted after the end of the second term.

3. A candidate shall submit three printed or type-written copies of his Thesis to the Registrar a fortnight before the commencement of the examination.

4. The Registrar shall deal with the Thesis in the same way as he deals with the examination answer-books.

5. The Thesis shall be jointly valued by an external and an internal examiner.

### Doctor of Philosophy.

1. Application for permission to enter upon a course of study for the degree of Doctor of Philosophy must be made at the commencement of any University term—through the Head of the Department and the Dean of the Faculty, mentioning the subject on which a candidate proposes to work.

2. The Faculty shall approve the subject of the candidate and appoint a supervisor to guide his research,



on the recommendation of a committee consisting of the teachers of the department concerned, with the Head of the Department as Convener.

The Committee will give due consideration to the preferences of candidates regarding the choice of supervisors.

3. Candidates for the degree of Ph.D. shall have taken the Master's degree in Commerce of this University or of any approved University.\*

Provided that applicants who having passed the B.Com. Degree Examination of the Lucknow University or any other approved University, have also obtained the Master's degree in Economics of the Lucknow University or any approved University may also be permitted to supplicate for the Ph. D. degree.

Provided further that Teachers in the Faculty of Commerce who hold the M.A. degree in Economics or any equivalent degree of this or any approved University may be permitted to supplicate for the Ph. D. degree.

4. (i) Candidates for the degree of Doctor of Philosophy shall be required to have carried on research work under the supervision of the University for six terms. A certificate to this effect signed by the Head of the Department and countersigned by the Dean will have to be produced.

(ii) Candidates shall be required to have resided for six terms in the University before presenting their dissertation.

The Head of the Department may grant permission to a candidate to reside outside Lucknow for purpose

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\*For the list of approved Universities, see Chapter VII.



of collecting material for his thesis for not more than four out of six terms; such exemption shall not be granted for the first term.

Provided, in special cases, candidates who have been formally admitted to the Ph.D. class in accordance with Ordinance Nos. 1 and 2 *supra* and are Masters of Commerce or Masters of Arts in Economics of the Lucknow University, may be exempted from residence in Lucknow by permission of the Dean on the recommendation of the Supervisor and the Head of the Department concerned.

5. Teachers in the Faculty of Commerce or in the University who hold the degree of M.A. in Economics or M.Com. or any equivalent degree of this or any other approved University, \*may be permitted by the Faculty to present a Thesis for the degree of Doctor of Philosophy after three years' service in the University. They will be required to notify the Registrar at least six months before the date on which they propose to present the Thesis.

6. A candidate for the degree of Doctor of Philosophy must submit three printed or type-written copies of the Thesis accompanied by the prescribed fees. He shall also submit a brief abstract of his Thesis and indicate in a prefatory note what part of the Thesis he claims as original, and what sources he has used.

7. A thesis which has already been presented for the M.A. or M.Com. degree will not again be accepted for the degree of Ph.D. but it may be wholly or partly included in an extended investigation, provided that the part so included be clearly indicated. The Thesis shall include a definite contribution to knowledge.

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\*For the list of approved Universities, see Chapter VII.



8. If the examiners consider the Thesis to be of sufficient merit they may recommend that the candidate should receive the degree without further examination, or they may require him to undergo an examination which may be written or oral or both, on the subject of his Thesis.

9. The report of examiners shall be laid before the Results Committee. If the Committee is satisfied that the reports of the examiners are unanimous and definite, they may recommend to the Executive Council that the result be published. If, however, the reports show a divergence of opinion between the examiners, the Committee may direct that the reports be exchanged between them, the examiners being requested to submit a joint report, if possible. The Committee may, at its discretion, and shall, if the reports are conflicting even after an exchange of views, refer the Thesis to another external examiner.

10. A printed or type-written copy of each accepted Thesis will be lodged in the University Library where it will be opened to public inspection.

A summary of not more than 1,000 words shall also be furnished by the candidate, to be published as the University may direct.

11. The dissertation submitted for the degree of Ph.D. shall be on some branch of one of the following subjects:—

Commerce : Accounting, Industries and Resources, Commercial and Industrial Organisation, Co-operation, Marketing, Transport, Stock Exchange, Insurance.

Economics: Money, Currency, Banking, Public Finance, Statistics, Trade and Commerce, internal and external.



## B.—SCHEME OF EXAMINATIONS.

Each Paper in the B.Com. Examination shall be of three hours' duration and shall carry a maximum of 100 marks. Candidates must pass in each Section and the minimum marks for passing in each Section are 33 per cent of the total number of marks.

### Bachelor o Commerce.

#### Previous.

(1) (i) Accounting or Banking or Actuarial Mathematics	....	{ 1 Paper 100 1 Paper 100 1 Paper 100	} Minimum pass marks 66
(ii) Transport	....	{ 1 Paper 100	
(2) (i) Business Organisation	....	{ 1 Paper 100	} 66
(ii) Indian Industries and Re- sources.		{ 1 Paper 100	
(3) (i) Economics	....	{ 1 Paper 100	} 66
(ii) Co-operative Organisation and Finance or Insurance		{ 1 Paper 100 1 Paper 100	
	....	{ 1 Paper 100	

First division	.... 60%	} of the aggregate marks.
Second division	.... 48%	
Third division	.... 36%	

Special Test in Accountancy .... 1 Paper 100

Minimum pass marks .... 33

*Time allowed for each Paper—3 hours.*



## Final.

(1)	Advanced Accounting and Auditing or Elements of Actuarial Science .... or Advanced Banking	....	{ 2 Paper 200 2 Paper 200 2 Paper 200 }	Minimum pass marks 66
(2)	(a)	(i) Trade of India .... (ii) Transport .... or Economic History .... or Marketing Practice and Finance.	{ 1 Paper 100 1 Paper 100 1 Paper 100 1 Paper 100 }	66
or	(b)	(i) Geography (ii) ..	{ 1 Paper 100 Practical 100 }	66
or *	(c)	(i) Military Science .... (ii) Military Science ....	{ 1 Paper 100 Practical 100 }	66
Candidates taking Military Science as a separate subject shall be required to pass in the Theory and Practical Examination separately.				
Minimum pass marks in Theory		....	....	33%
Minimum pass marks in Practical		....	....	33%
(3)	(i) Statistics .... (ii) Public Finance ....	....	{ 1 Paper 100 1 Paper 100 }	66
(4)	(i) Mercantile and Industrial Law. (ii) Secretarial Practice and Company Law.		{ 1 Paper 100 1 Paper 100 }	66

\*Only such candidates will be allowed to take Military Science for the B.Com. Final Examination as have failed in the B.Com. Final examination in Military Science.



<i>First division</i>	.... 60%	} of the aggregate marks.
<i>Second division</i>	.... 48%	
<i>Third division</i>	.... 36%	
Special Test in Accountancy	.... 1 Paper—100	
Minimum pass marks	.... 33	

*Time allowed for each Paper—3 hours.*

### Master of Commerce.

#### Part I.

(1) Accounting Problems and Practice or Advanced Actuarial Practice or Banking Problems and Practice.	1 Paper 100 1 Paper 100 1 Paper 100	} Minimum pass marks 144.
(2) Any <i>three</i> Papers of the following:—		
(i) Economic Thought and Business Economics.	1 Paper 100	
(ii) Advanced Transport.	1 Paper 100	
(iii) Labour Management and Industrial Relations	1 Paper 100	
(iv) Applied Statistics.	1 Paper 100	
(v) International Trade and Foreign Exchange.	1 Paper 100	

*Time allowed for each Paper—3 hours.*



## Part II.

(1) Any *four* Papers of the following:—

(i) Commercial Development and Industrial Organisation from 1800 to 1939.	1 Paper 100	Minimum pass marks 180.
(ii) Organisation and Finance of Major Industries in India.	1 Paper 100	
(iii) Organisation, Finance and Regulation of International Commerce.	1 Paper 100	
(iv) Business Administration.	1 Paper 100	
(v) Advanced Economic Theory and Analysis.	1 Paper 100	
(2) <i>Viva Voce</i> ....	100 marks.	
(3) Thesis ....	100 marks.	

*Time allowed for each Paper—3 hours.*

<i>First</i> division ....	60%	} of the aggregate marks in the combined results of Parts I and II.
<i>Second</i> division ....	48%	
<i>Third</i> division ....	36%	



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### *C.—COURSES OF STUDY.*

#### **B.COM. PREVIOUS.**

##### ***Special Test in Accountancy.***

Single Entry; Journal, Ledger, Cash Book, Purchases Book, Sales Book, Stock Book, Petty Cash Book, etc. Reconciliation Statement; Bill of Exchange; Trial Balance; Trading Account; Revenue Account; P. and L. Account; Balance Sheet; Consignment Account; Joint Venture; Partnership Account; Receipts and Payments Account and Income and Expenditure Account; Depreciation and Reserve; Joint Stock Company Account; Loose Leaf Card System; Account Current and Average Due Date.

##### ***Books recommended:***

M. L. Agarwal: Book-keeping and Accountancy, Parts I and II.

J. R. Batliboi: First Steps in Double Entry Book-keeping.

##### **Accounting.**

There will be only *one* paper:—

Partnership—advanced problems and detailed study.

Joint-Stock Company advanced.

Absorption, Amalgamation and Reconstruction Accounts.

Hire Purchase and instalment systems.

Royalties Accounts.

Insolvency and Liquidation Accounts.

Double Accounts System.



Branch Accounts.

Bank Accounts.

Insurance Accounts.

Contract Accounts.

Non-trading Organisation Accounts.

Miscellaneous Accounts.

*Books recommended:*

Batliboi: Advanced Accounts.

Carter: Advanced Accounts.

H. Banerji: Book-keeping made Easy.

S. R. Davar: Higher Accountancy.

### **Banking.**

There will be only *one* paper:—

*Currency*:—The functions and economic significance of money. Various forms of money. Quantity Theory of money. Currency appreciation and depreciation..... causes, effects, and remedies. Currency Principle, and Banking Principle. Methods of regulating note-issue in different countries. Various proposals for international Currency. Bimetallism. Symetallism. Tabular standard. Fisher's Compensating Dollar. International Bimetallism.

Indian Currency system. Historical development and present currency and exchange problems. The War and Gold Exchange standard in India. Sterling Exchange standard.

*Banking*:—The nature of banking and the functions of the banker. Simple banking operations. The general structure and methods of English banking. How to read the Balance-Sheet of a bank. Banking and money market. The reserve and the Discount rate. Causes of fluctuation in the Bank rate. Credit and its developments,



*Indian Banking System* :— Exchange Banks. Joint Stock Banks. Indigenous Banking. Co-operative Banks, The Imperial Bank of India, The Reserve Bank of India, Structure of Indian money market, War and Indian Banking, Problems of Indian Banking.

*Books recommended:*

Scott: Money and Banking.

Report of the Royal Commission on Indian Currency and Exchange, 1926.

P. Einzig: Monetary Reforms in Theory and Practice.

J. Sinha: Indian Currency.

Cassel: Decline of Gold Standard.

Dr. L. C. Jain: Indian Monetary Problems.

Reserve Bank Act.

Report of the Indian Central Banking Enquiry Committee.

Panandikar: Banking in India.

P. D. Saksena: Money, Credit and Foreign Exchange.

Geoffrey Crowther: Money.

The following chapters of the Majority Report of the Central Banking Enquiry Report :—

VIII (Indigenous Banks)

XII (Commercial Banks)

XVII (Reserve Bank)

XVIII (Banking System and Money Market—Imperial Bank of India)

to be read with the corresponding chapters of the Minority Report.



### Actuarial Mathematics.

- (i) *Trigonometry*:—Trigonometrical ratios. Easy trigonometrical identities and equations. Solutions of right-angled triangles.
- (ii) *Algebra*:—Arithmetical, Geometrical and Harmonical Progressions. Theory of Indices and Logarithms. Permutations and Combinations. The Binomial Theorem for a positive integral index. The Binomial Expansion for any index. Esponential and Logarithmic Series. Partial Fractions—Simple Inequalities.
- (iii) *Elementary Theory of Finance*:—Basic functions. Annuities—certain. Loans repayable by instalments. Construction and use of tables. Simple methods of determining the rate of interest in a transaction. Capital redemption assurances. Valuation of simple loans and debentures.

#### *Books recommended:*

- L. H. L. Davies: Commercial Mathematics.
- Hall and Knight: Higher Algebra (Macmillan & Co.).
- Sengupta: Commercial Arithmetic.
- Todhunter: Compound Interest and Annuities Certain, (C. U. P.).
- Williams: The Mathematical Theory of Finance (Macmillan & Co., New York).
- Mackenzie: The Mathematics of Finance. (McGraw Hill Book Co., New York and London).
- Hobert H. Edwards, F. I. A: Compound Interest.
- Castles' Five—Figure Logarithm Tables, (C. U. P.)  
(A short collection of Actuarial Tables,  
(C. U. P.)



## Transport.

There will be only *one* paper.

*General:—*Place of Transport in Modern Economy. Comparative utility of the different modes of transport and their process of evolution.

*Road Transport:—*Socio-economic importance of Roads, Evolution of the Modern Road. Essentials of an Ideal Road. Brief history of road development in India. Present position of Roads in India and Comparison with other countries. Roads in U. P. Administration and Finance of Roads. Jayakar Road Development Committee Report. Nagpur Plan. Economics of Cart Transport. Motor Transport. Rail-Road Problem. Nationalisation of Road Transport. Nationalisation Scheme of the U. P. Government. Organisation of City Transport.

*Railway Transport:—*The influence of geographical factors on the construction, development and traffic of railways in India. Development of Railways in India and its social and economic effects. Evolution of the Railway Board. Peculiarities of Railway Transport. Elementary principles of Rate fixation. Nationalisation and Indianisation of Railways. Railway Insurance.

*Water Transport:—*Important Shipping terms. Difference between Sailing vessels, Liners and Tramps. Inland water transport. Situation and Significance of Ports. Port position of India. Indian Coastal traffic, Rate wars, Rebates and Defferred Rebates. State-aid to shipping.

*Books recommended:*

Acworth Commission Report.

Haji, S: Economics of Shipping.

Road Development Committee Report.



Kirkness and Mitchell Report.

Srinivasan: Railway Freight Rates.

Acworth: Elements of Railway Economics.

Sanyal, N. N : Development of Indian Railways.

M. K. Ghosh: Transport Development and Co-ordination.

### **Business Organisation.**

There will be only *one* paper:—

Organisation of the main departments of a business.

Essentials of a good system of organisation.

Characteristics of a business owned by a single individual or Partnership or a joint-stock Company.

Economic features of Joint-Stock Company.

Factors which determine the size of a business unit.

Multiple shop. Departmental Store Mail-Order Business.

Monopolistic Combinations.

A general idea about Gentlemen's Understandings.

Pools, Cartels, Trusts, Holding Company, Community of interest, etc.

Vertical and Horizontal Combinations.

Scientific Management: Planning Department, Time Study, Motion Study and Fatigue Study.

Rationalisation of Industry.



Some important methods of remunerating labour  
*viz.* :—

Halsey Method.

Rowan Method.

Taylor Method.

Gantt Method.

Advertising.

Produce Exchanges.

Spot and Future transactions. Advantages of Future dealings.

Economic case for speculation.

A general idea about Hedgings, Options, etc.

Stock Exchange—Economic functions and its general working in the Indian Exchanges.

*Books recommended:*

Marshall: Industries and Trade (Chapters VII—XII, Book II.)

Pant: Business Organisation.

Shields: Evolution of Industrial Organisation.

Provincial Banking Enquiry Committee Reports (Selected Chapters).

J. C. Mitra: Theory and Practice of Commerce and Business Organisation (3rd edition).

B. B. Ghosh: Business Organisation.

R. C. Chowdhary: Principles of Industrial Organisation.



## Indian Industries and Resources.

There will be only *one* paper:—

*General*:—Irrigation Canals, Hydel Power, Labour and Factories Act, Cottage Industries, Fishery, Food position.

*Agricultural Wealth*.—Cotton, Sugar-cane, Jute, Tea, Tobacco, Oil-seeds.

*Forest Wealth*.—Lac, Timbers, Cutch, Sandalwood, Myrabolans, Rubber, Hemp, Hides, and Skins.

*Mineral Wealth*.—Coal, Iron, Manganese, Mica, Salt, Petroleum.

*Industries*.—Sugar, Glass, Textile, Jute, Iron, Paper, Turpentine, Leather.

Recommended for reading:—

Annual Reports of Provincial and Central Governments and of Committees.

Special treatises on above topics.

Newspapers and Magazines.

Lorenzo, A. M.: Indian Labour in Primary Industries.

Brown, C. J.: The Mineral Wealth of India.

Pratter, H.: Common Commercial Timbers of India and their Uses.

Symthre: The Forest Wealth of India.

Das Gupta, A.: Economic and Commercial Geography.



### Economics.

*There will be only one paper:—*

- A.—Nature of Economic Phenomena. Definitions of Economics. Nature and Implications of Wealth. Fundamental Conditions of Economic behaviour. The Theory of Choice. Economic Decisions. Socialistic or Capitalistic Methods to implement Economic Decisions. Importance of Price System.
- B.—Price and value. Theories of value. The labour theory of value. Cost of production theory. Embodied and displaced costs. Real and monetary costs. Utility theory of value. Marginal utility theory. The Esteem value. The relative esteem value. The Indifference curves. The Indifference ratio. The exchange ratio. Equilibrium between supply and demand. The long and the short period Relations. The conception of elastic and inelastic demand. Elastic and inelastic supply.
- C.—Volume of Production. Its measurement, Factors of Production. The question of Population. The Malthusian and the Optimum theories of Population. Fluctuations in Business Activity. The theories of Business Cycle. The Mobility of Factors of Production. Equal efficiency and complete mobility. Non-competing groups with unequal efficiency. Exchange and division of labour. Equilibrium pro-



duction. Combination of Factors. The law of diminishing returns. The theory of Marginal productivity. Production under competitive and monopolistic conditions.

D.—The old theory of distribution, personal and social approach. The new theory—the “Value” Approach. Special problems of Rent, Interest, Wages and Profits.

E.—Theory of the value of Money. Measurements of Price changes. Index Numbers. Standards of currency system. Importance of currency and credit Control.

*Books recommended:*

Benham: Economics.

Robbins: Nature and Significance of Economic Science.

Cannan: Wealth.

Joshi and Sharma: Arthashastra.

Sanyal: मार्क्सवादी अर्थशास्त्र

Sankrityayan: साम्यवाद ही क्यों ?

**Co-operative Organization and Finance.**

There will be only *one* paper:—

*Co-operative Credit:*—The general idea of co-operation. Its origin in Europe. Different types of co-operative credit societies. Raiffeisen Village Banks and Schulze-Delitzsch Banks of Germany, Luzzatti's People's Banks in Italy. The Casse-Rurale, Agricultural Banks of Egypt. Agricultural Syndicates of France, Credit Foncier and Land schaften.



*Rural Indebtedness in India*.—Its nature and its size. Preliminary experiments to solve the question in India. Early forms of credit in India. The Co-operative Societies Act (II of 1912). Its origin and history. Privileges enjoyed by the Co-operative Societies. Position in the U. P. Measures taken to combat rural indebtedness in U. P.

*Primary Credit Societies for Agriculturists*.—Unlimited liability societies. Its area of operation. Its organization. Unlimited liability. Objects of loans for the repayment of old debts and rent. Sureties. Deposits. Reserve Fund. The maximum credit of each member. The *haisiyat*. Village Banks and Co-operative Grain Banks.

*Primary Credit Societies for Non-Agriculturists*.—General Credit Society for Non-Agriculturists. Liability. Its organization and administration. Amount of loans. Security of loans. Sureties, Sources of funds. Difficulties of such Societies for weavers and factory operators. Salary earners' Society.

*Non-Credit Agricultural Societies*.—Co-operative dairy and cattle-breeding societies. Cattle insurance. Agricultural supply societies for implements, Manures, seeds. Co-operative irrigation societies, co-operative consolidation of holding societies, co-operative farming, co-operative agricultural sale societies. Better living society.

*Non-Credit-Non-Agricultural Societies*.—Co-operative stores, co-operative housing, co-operative wholesale societies. Co-operation and village industries.

*Land Mortgage Banks*:

*Co-operative Finance in Primary Societies*.—The share system—its advantages. The reserve fund and its



importance. Limited and unlimited liability. Sources of funds in primary societies.

*Higher Co-operative Finance. The Central and District Banks.*—Their objects, constitution and management. The conditions of success. The composition of their capital. The share system and reserve liability. Loans from Joint Stock Banks and access to the money markets. Cash credit. Inter-lending between Banks. Its danger and difficulties. Importance of local deposits. Current accounts, fixed deposits, saving accounts, reserve fund and fluid resources. Maximum credit of societies. Custody of cash. Disposal of profits. The relation between Central and District Banks. Guaranteeing Unions. Supervising Unions.

*Higher Co-operative Finance. The Provincial Banks.* Its advantages—Its nature and its functions. Its organization and management. The sources of its fund. The employment of idle money in slack seasons. The difficulties in the way of a Provincial Bank and the means of removing them. The relation between the Provincial Co-operative Bank and the Commercial Banks, U. P. Provincial Co-operative Bank.

*Supervision and Control of Co-operative Societies.*—The organization of the Co-operative Department, Audit and Inspection of Co-operative Societies and Banks. Arbitration, Liquidation.

The results of the Co-operative Movement in India—economic, social, moral and political.

History of the Co-operative Movement in U. P. Causes of the backwardness of the Movement in U. P. and ways of removing them. The responsibility of the Provincial Government and the public in the Co-operative Movement.



**B. COM. FINAL.****Advanced Accounting and Auditing.**

There will be *two* papers:—

*Paper I:*

*Cost Accounts.*—Its meaning, Principal systems of ascertaining cost: Principal methods of distribution of on-cost and their application; Stores Requisition Note, Stores Ledger, Time Sheet, Wages Summary, Goods Received Books, Bin Card Cost Ledger, Cost Sheet Plant Register, Store-keeping system, Pricing of Stock, Methods of stock-making, Apportionment of expenses, Relation of Revenue items to cost.

Income-tax and Super-tax Accounts.

Charge of Income-tax.

Application of the Act and exemptions.

Heads of Income.

Bases of Assessment with regard to each head.

Taxation of Registered Firm.

„ „ Unregistered Firm.

„ „ Individual.

„ „ Hindu Undivided Family.

„ „ Company.

„ „ Discontinued business.

„ „ New business.

Meaning and method of determination of total income  
refunds, set-off of loss.

Equitable adjustment.

Rates of income-tax and super-tax. Obsolescence.  
Charge of super-tax. Total income for super-tax purposes.  
Application of the Act to super-tax.



*Paper II.*

Absorption, Amalgamation, Reconstruction Accounts.

Double Accounts System.

Insurance Accounts.

Insolvency and Liquidation Accounts.

Hire-purchases and Instalment Accounts.

Royalties Accounts.

Criticism of Published Accounts.

*Auditing.* — Detection of fraud and error; Audit under statute; Audit of firm's and individual's business; continuous and periodical Audits. Commencement of new Audit. Audit programme; vouching payments, vouching capital expenditure. Verification of assets and liabilities; vouching receipts; audit of trading transaction; valuation of stock and investments. Auditor's powers, duties and liabilities; Company audit in broad outlines; Investigations. Profits available for dividend.

*Books recommended:*

Lunt: Manual of Cost Accounts.

Ridgeway: Cost Accounts.

Cropper: Higher Accounting.

De Paula: Auditing.

Batliboi: Advanced Accounts.

B. N. Das Gupta: A Treatise on Income-tax Law and Accounts.

R. B. Bose: Principles and Practice of Auditing.



### **Advanced Banking**

#### **PRACTICE AND LAW OF BANKING:**

There will be *two* papers:—

The ordinary practice of Bankers with regard to the opening and conduct of Banking account.

Relation between the banker and the customer. The practices and law relating to the following:—

*Cheques.*—Form, Endorsements, Crossing of Cheques, Forgery and Alteration, Banker's marks on Cheques, Termination of Banker's authority to pay Cheques.

*Bill of Exchange.*—Forms, Endorsement, Acceptance for honour, case of need, Noting, Protest, Stamp duties, discharge of a bill.

Discounting of bills of Exchange.

Theory and characteristics of Negotiability, Promissory Notes, I. O. U.

*Banker's Credit.*—Travellers' letters of credit, Circular notes, Confirmed Banker's Credit. Unconfirmed Banker's Credits, London Acceptance Credit, Documentary Credit, Revolving Credit, Financing of Foreign Trade in India.

*Bankers' Advances.*—Advances against marketable securities, goods and produce, real property, ships, guarantees, debts, debenture of Companies, Life Insurance Policies, unsecured advances.

### **Banking in India**

Commercial and Exchange Banks. The Bill Market in India. Relation between the various components of the Indian money market. Bank rate and Bazar Hundi note. Land Mortgage Banks and Industrial Banks in India.



### **Central Banking in India.**

Relations between the Reserve Bank and the components of the Indian Money Market. Methods of Credit Control in India. Reserve Bank and the Indian short-term money market.

### **Problems and Recent Development of Modern Banking.**

Investment Policy of Banks, Mechanism of clearing cheques and bills. War and Indian Banking. Regulation and Control of Banks. Branch Banking. Amalgamation. Bank Insurance.

Post War Currency and Ratio Problems in India.

International Monetary Fund, and International Bank for Reconstruction.

### **Bank Organisation. Management and Account.**

Historical and comparative study of Banking with special reference to English, American and French systems.

#### *Books recommended:*

Sheldon: Practice of Banking.

Paget: Law of Banking.

Spalding: Banker's Credit.

Tannan: Law and Practice of Indian Banking.

Kisch: Central Bank.

Report of the Indian Central Banking Enquiry Committee.



Chapters X, XVII, XX and XXI of Majority Report.  
Chapter XVI of the Indian Central Banking Enquiry  
Committee's Report.

Thomas: Banking and Exchange.

M. M. Das: Practical Banking.

Bimal Ghosh: Introduction to Principles. Practice  
and Law of Banking (Oxford University Press).

Sayers: Modern Banking.

M. D. Joshi: Dravya Shastra.

P. D. Saksena: Principles and Practice of Banking.

### **Elements of Actuarial Science.**

*Paper I (i) Differential Calculus:*—The idea of a limit. Evaluation of limiting forms. Differential Co-efficient. Fundamental rules of differentiation. Differentiation of elementary function. Differentiation of implicit functions. Differentiation of the function of a function. Successive differentiation. Libnitz's theorem. Taylor's theorem. Mclaurin's theorem. Maxima and minima.

(ii) *Integral Calculus:*—The integral as the limit of a sum. Integration as the converse of differentiation. Fundamental rules of integration.

Integration of rational functions, irrational functions and trigonometric functions. Integration by parts. Definite integrals. Application of integral calculus to the determination of areas. Simpson's and other approximate rules. The Gamma Function.

(iii) *Analytical Geometry:*—Cartesian and Polar Co-ordinates. Straight lines, and elementary properties of the circle, parabola, ellipse and hyperbola through Cartesian Co-ordinates.



*Paper II (i) Probability:—*The fundamenal principle of Probability. Bernoulli's Theorem. Compound Probability, Total Probability. Repeated Trials. Expectation in trials.

*(ii) Calculus of Finite Differences:—*Theory of Finite differences. Interpolation formulæ. Interpolation with unequal intervals. Interpolation in tables of double entry. Summation.

*(iii) Statistics:—*Theoretical justification of short cut methods employed in elementary computations. The standard distributions—binominal, normal and poison.

*Books recommended:*

Harry Freeman: Mathematics for Actuarial Students, Parts I and II (Cambridge University Press).

Gorakh Prasad: Text-Book on Differential Calculus

Gorakh Prasad: Text-Book on Integral Calculus.

### **Trade of India.**

1. Trade and its development. Theory of Trade. Types of Trade. Distinction between Local, National and International Trade.

2. History of Indian Trade. Composition, direction and characteristics of India's foreign trade in ancient and mediæval periods and under the East India Company and from 1858 till the end of the World War II.

3. Home Trade of India. Trade between rural and urban areas. Trade of U. P. with the other provinces. Organisation and finance of home trade. Trade organisations of U. P. Trade controls and restrictions after World War No. II. Characteristics of home trade. Methods of improvement.



4. Transfrontier, Coastal and Re-export trades of India. Future prospects.

5. Export and Import trade. Volume, composition and direction. Recent tendencies. Methods of improvement. Export and import controls. Trade policy. Trade agreements.

6. Intermediaries of Indian Trade—Intermediaries of assembling, transport, distribution, finance and commercial intelligence.

*Books recommended:*

Palekar: Trade of India.

Bose: The Foreign Trade of India.

Joshi: Indian Export Trade.

Venkatsubiya: Foreign Trade of India—1900—1940.

Ganguly: Reconstruction of Foreign Trade of India.

Shah, K. T.: Trade, Tariffs and Transport.

Agarwala, A. N.: Position and Prospects of India's Foreign Trade.

Ray, P.: India's Foreign Trade.

Anstey, V.: Trade of the Indian Ocean.

Naidu, B. V. N.: Indian Trade.

**Transport.**

*Railway Transport:*—Administration of Railways. Re-grouping of Railways. State and public Control. Battle of gauges. Railway Committees: Acworth, Pope, Wedgewood. Railway Publicity, Labour and Stores. Railway Rates Advisory Committee. Theory of Railway Rates and Classification of goods. Influence of Railway Rates on the development and distribution of industries. Railway Finance.



*Water Transport:*—Principles of Shipping economics. Administration of Water Transport, Port Administration and dues, Rate making and classification of goods. Scindia Steam Navigation Co., Indian Mercantile Marine.

*Air Transport:*—Air Transport in India. its Civil and Military importance. International organisations in relation to aviation. Aerodromes. Air routes in India. Administration of Air Transport in India. Air Licencing Board. Stratosphere.

*Books recommended:*

Dr. R. Tewari: Railways in Modern India.

Edwards and Tymm: Commercial Air Transport.

S. Haji: Economics of Shipping.

Scindia Steam Navigation Bulletin.

### **Economic History of India.**

*1850—Present Day.*

Agriculture—Transition in Agriculture.

Land Tenures.

Problems of Agriculture.

State in relation to Agriculture.

Industries:—Industrial Evolution.

Trends in Industrial Developments.

Cottage and Factory Industries.

Trade and Tariffs:—Trends in Foreign Trade of India.

Industrial and Commercial Policy.

Labour:—Characteristics of Indian Labour, Labour Legislation, Trade Unionism.

Transport:—Development of Railways.



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*Books recommended:*

C. P. Srivastava: Economic Development of India.

Vera Anstey: Economic Development of India.

Gadgil; Industrial Evolution of India.

**Marketing Practice and Finance.**

Its nature and scope.

Problems of marketing—Standardisation Grading Packing. Transportation, Storage, Publicity, Trade Marks, Brands. Retail and whole-sale distribution.

Various kinds of market transaction—Spot Future, etc.

Marketing of Agricultural Produce:—Food crops, wheat, rice. Cash and commercial crops, oil seeds, sugar-cane, cotton, jute and tobacco.

Marketing of manufactured goods:—Cotton piece goods, Jute manufactures and Iron and Steel Manufactures.

Co-operative marketing.

Marketing Finance, Marketing Legislation in India.

Control of markets.

Marketing of stocks, shares, bonds, etc.

*Books recommended:*

Mukerji: Agricultural Marketing in India.

S. A. Husain: Agricultural Marketing in India.

Govil, K. L.: Marketing in India.

Dantawala: Marketing of Raw Cotton in India.



Report of the Royal Agricultural Commission.

Report of the Central Banking Enquiry Committee.

Report of the Provincial Banking Enquiry Committee.

Report of the Jute Enquiry Committee.

Marketing reports 1st and 2nd of Indian Central Jute Committee.

Report of the Indian Central Cotton Committee.

Report of the Agricultural Marketing Advisor to the Government of India.

### **Geography.**

Geography, one Paper—as per Geography Paper II for B.A. and B.Sc. (Pass).

Geography Practical—as per Paper III for B.A. and B.Sc. (Pass).

### **Military Science.**

Military Science Paper II—as per B.A. Pass Examination.

Practical—as per B.A. Pass Examination.

### **Statistics.**

There will be only *one* paper:—

*General.*:—The nature and scope of Statistics. Its uses and relation to other sciences. Definition of Statistics. Law of Statistical Regularity. Inertia of Large Numbers. Limitations of Statistics.

*Methods of Statistical Enquiry*:—Planning. The collection of data. Determination of the Unit. Its



characteristics. Collection of data by schedules and personal investigations. The character of questions. Approximation and Accuracy. Standard and limits of possible accuracy. Biassed and unbiased errors. Their effects.

*Arrangement of Data:*—Tabulation. Its function its varieties. General rules for construction of tables. Selection of limits of groups in Frequency Tables. Continuous and Discrete Series.

*Type and Average:*—The arithmetic average. Simple, weighted, progressive and moving averages. The Geometric Mean. Descriptive Average's. The Median and Quartiles. The Mode. Relative merits and demerits of different types.

*Dispersion:*—Its meaning and method of measurement. The Range. The Moments of Dispersion. The Co-efficient of dispersion. Mean and Standard Deviations. The Quartile measure and Co-efficient of dispersion. The relative merits and demerits of the different methods. The Lorenz Curve.

*Skewness:*—Its meaning, Measures and Co-efficient of Skewness.

*Index Numbers:*—Their object. Methods of Construction. Fixed Base and Chain Base Numbers. Weighing. Principal Published General Index Numbers. Cost of Living Index Numbers. The technique of their construction.

*Diagrammatic and Graphic Representation of Data:*—The importance of diagrams. Different kinds of diagrams. Bar, Rectangular, Square and Three Dimensional Diagrams. Their Relative merits and demerits. Graphs. Their uses. Rectangular and smoothed Histograms. The Frequency Polygon. The Ogilve Curve. Graphic method of locating the Median and the Mode.



Historiograms. The Trend. The Fluctuations. Random. Compensated. Undulatory and Periodic Fluctuations. Methods of eliminating the seasonal effect.

*Correlation*:—Definition of Correlation. Karl Pearson's Co-efficient of Correlation. The Modified Methods of Kari Pearson's Co-efficient for short time oscillations. The Co-efficient of Concurrent Deviations. The use of the Lag. The Probable Error. Correlation of Groups.

*Ratio of Variation*:—Its definition. Methods of computing the co-efficient of variation. The Galton Graph.

*Interpolation*:—Its uses. Technique of Interpolation. The Graphic method. Algebraic Treatment.

*Administrative Statistics*:—Existing Statistical Organisation in India. History of its formation. The Statistical Department of the U. P. Government. Types of Statistics collected by the Department of Economics and Statistics of the U. P. Government. The existing sources of Indian and Provincial Statistics. The Bulletin of Economics and Statistics, U. P. The Labour Bulletin. The Provincial Census Reports. The nature of information contained therein. The usefulness of these publications. Indian Agricultural Statistics. The Provincial Agricultural Statistics. The method of estimating the yield of various crops. Drawbacks of the existing system. Movement of Prices and Wages. Index of Wholesale prices. The Retail prices: The Cawnpore Cost of Living Index Numbers. The Money wage and the Real wage indices. Trade Statistics, Methods of Comparison of Trade Statistics.

*Books recommended*:

Bowley Robertson Committee Report.

Boddington: Statistics and their application to Commerce.



Ghosh and Choudhary : Statistics : Theory and Practice.

Dr. Ziauddin Ahmad : Practical Statistics.

W. I. King : The Elements of Statistical Method.

Current Issues of Bulletin, Department of Economics and Statistics, U. P.

Current Issues of Labour Bulletin Published by the Labour Department of the U. P.

### **Public Finance.**

There will be only *one* paper:—

*Public Finance*:—Its scope and relation to other sciences. Distinction between State and Individual Finance.

*Public Revenue*:—Classification of the sources of public revenue.

Nature and principles of taxation. Classification of taxes. Single and multiple system of taxation. Distribution of taxes and the problem of equity in taxation. The various principles of equitable taxation. Edgeworth's minimum sacrifice theory. The incidence of taxation. Effects of taxation on production. Effects of taxation on distribution. The requirements of a sound tax system. Adam Smith's Canons. Taxable Capacity.

*Public Expenditure*:—Considerations affecting the field and propriety of public expenditure.

*Public Debt*:—Classification of public debts and the technique of the floatation of loans. The consequences of national debts, external and internal, borrowing and inflation. The method of repayment of public debts. The question of capital levy.



*Indian Public Finance*:—Financial relations between the Union and State Governments. Famine Insurance Policy. Powers of the Provinces in the matter of revenue, expenditure and debt.

The system of Indian Financial Administration:—

The preparation of the budget, the voting of the budget, the execution of the budget, and the audit of accounts. The control by the Legislature on the Central Government Finance.

The principal heads of revenue and expenditure of the Government of India. The principal taxes levied—their examination in the light of economic theory. The Indian import duties in their Revenue and Protective aspects. The Excise duties.

The national debt of India. The programme of debt reduction or debt avoidance.

*Books recommended:*

Dalton: Principles of Public Finance.

Report of the Indian Taxation Enquiry Committee.

Vakil, C. N.: Financial Developments in Modern India, 1860—1924.

Gyan Chand: Federal Finance.

J. K. Mehta and S. N. Agarwal: Public Finance.

**Mercantile and Industrial Law.**

There will be *one* paper:—

Indian Law relating to:—

1. Negotiable Instruments and Hundies.
2. Mortgages.
3. Common Carriers and Indian Railways.



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4. Charter parties.
  5. Shipping.
  6. Contracts:—Formation. Capacity of parties. Assignment. Effects of Mistakes and Misrepresentation, Fraud, Undue influence. Breach of contract. Performance and Discharge. Bailment. Agency. Guarantee. Loan and hire of goods.
  7. Sale of Goods.
  8. Partnership.
  9. Insurance—Life, Fire and Marine.
  10. Arbitration.
  11. Insolvency.
  12. Factories.
  13. Workmen's Compensation.
  14. Indian Trade Disputes.
  15. Indian Trade Union.

*Books recommended:*

Pollok and Mulla: Indian Contract Act, (Student's edition).

Davar: Elements of Indian Mercantile Law.

Banerjee A. K.: Indian Mercantile Law.

Shri Gopal Singh: The Law of Mercantile Usages in India.

Shukla M. C.: Mercantile Law.



## Secretarial Practice and Company Law.

There will be only *one* paper:—

I. (a) Responsibilities and duties of the officers of a company: Secretary, Directors, Managing Agents and Auditors. Incorporation of a company: Memorandum of Association, Articles of Association and other connected papers. Prospectus. Rule of minimum subscription. Application and allotment of shares. Calls on shares. Forfeiture, surrender, transfer and transmission of shares. Joint holding of shares. Share and stock warrants to bearer. Conversion of shares into stock and stock into shares. Company's common seal. Company's statutory books.

(b) *Meetings*:—Director's meeting. Statutory meeting. Annual general meeting. Extraordinary general meeting. Special meetings. Notice. Agenda. Voting. Minutes. Resolutions: Ordinary, extra-ordinary and special. Amendment, closure, previous question, etc. Chairman: powers and duties.

(c) *Report Drafting*:—Statutory report, annual report and accounts, committee report, and press report.

(d) *Liquidation of a Company*:—Compulsory Liquidation. Voluntary Liquidation. Subject to Supervision of Court. Liquidation of Unregistered Companies. Removal of Defunct Companies.

II. *Correspondences*:—Official and Commercial Letters.

III. Correction of Printer's Errors—General Printing Corrections.



***Books recommended:***

The Chairman's Guide.

Coles: Guide for Company Secretary.

Davar: Elements of India Company Law.

Indian Companies Act amended up to 1936.

Mazumdar N. K.: Indian Companies Act, 1913—1936.

Govil and Vaish: Company Law in India.

Nagamia and Bhal: Modern Business Correspondence.

Jain: Official Drafting.

Majumdar: Commercial Correspondence.

Pant D.: Business English.

Davar: Law and Procedure of Meetings in India including Club Law.

**M.Com Part I.****Accounting Problems and Practice**

*A.*—Detailed methods of account keeping with respect to *three* of the following:—

- (1) Export and Import Business.
- (2) Sugar Companies.
- (3) Textile Companies.
- (4) Printing Business Companies.
- (5) Banking Companies.
- (6) Insurance Companies.



(7) Holding Companies.

*B* —Income-tax Accounts and Connected Law.

*C*.—General Accounting. Problems including Works and Factory Accounting.

**Banking Problems.**

History and present position of Central and Joint-Stock Banking in England, Germany, France and U. S. A.

Organisation of Money Markets of England, Germany, France, U. S. A. and India. Structure and Organisation of Central Banks. Operations of Central Banks. The relation between Central Banks and Joint-Stock Banks. Place of Joint-Stock Banks in the money markets. The relations between Joint-Stock Banks and industrial concerns. Bank rates and trade cycles. Bank rates and their effects on trade, business and price level. Banking Accounts. Recent Banking Developments.

Banking problems and legislation in the above countries.

*Books recommended:*

H. P. Wills and Beckhart: Foreign Banking Systems.

Myers: Paris as a Financial Centre.

Barret Whale: Joint-Stock Banks in Germany.

Ellis: German Monetary Theory.

Greavanger: Pound Sterling.

Sayer: Bank of England, 1800—1914.

Truptill: British Banks.

M. B. Northcrop: Control Policies of Reichs Bank.



A. J. S. Astor: International Banks.

J. C. Madden & Nadler: International Money Markets.

Refier: Money Markets and Money Rates in U. S. A.

Parker Wills: Federal Reserve System.

T. A. K. Grant: A study in post-war British Capital Market.

Willis: Theory and Practice of Central Banking.

Kisch & Elkin: Central Banks.

Cannan: The Paper Pound.

Hayek: Monetary Theory and Trade Cycle.

Steiner and Sapiro: Modern Banking.

Mackenzie: Banking systems of England, France, Germany and U. S. A.

Basu: Recent Developments of Banking.

Sayers: American Banking System.

### **Economic Thought and Business Economics.**

#### ***A. Economic Thought.***

English Economic Thought from Mercantilism to Keynes. German Historical School. Austrian School. Modern Socialism. Marxian Socialism and its modern interpretation.

#### ***B. Business Economics.***

Foundations of Economic Activity—Nature of Organised Society. Characteristics of Modern Economic Society.



Organisation of Production—Nature of Production. Nature and Functions of Management. Size of business enterprise. Forms of business Organisation.

Concept of Macro economic Theory—Savings, investments, employment. Components of national income. Inequality of incomes, its causes and remedies.

The price-making Process.

(a) Demand.

Analysis of demand. Elasticity of demand. Average and marginal revenue curves.

(b) Supply.

Firm and industry. Average Cost and Marginal Cost curves. The Supply curve of an industry. Opportunity Costs. The laws of Return. Equilibrium Price.

Exchange—Market and normal price. Price under perfect competition, imperfect competition and monopoly. Control of monopoly. Business adjustments in a dynamic market. Adjustments in cyclical depressions.

*Distribution*—Functional and personal distribution. Determination of the shares of the factors of production.

Taxation Policy affecting business and industry.

Role of the Consumer—The Consumer and the price system. Direct and indirect consumption. Factors affecting consumer's Choices.

The State in relation to industry.



Comparative economic systems—Free enterprise—  
Controlled Economy, mixed Economy,  
Public Corporations, Socialised Economy.

*Books recommended:*

- Barbara Wooton: Freedom under Planning.  
Samuelson: Economics—An Introductory Analysis.  
Hicks: The Social Framework.  
Boulding: Economic Analysis.  
J. Robinson: Economics of Imperfect Competition (Selected chapters).  
Haney: History of Economic Thought.  
Erich Roll: History of Economic Thought.

**Advanced Actuarial Practice.**

(I) The Mortality Table.

(II) The Theory of Probability: Numerical problems on compound probability, involving Life Contingencies.

(III) Life Annuities:—

Commutation columns, Pure endowment: Ordinary, due, deferred and temporary Life annuities. Net single premiums and periodic payments Annuities with death benefits.

(IV) Life Insurance:—

Whole life policy and Limited payment policy. Term insurance. Endowment insurance. Reserves on policies. Surrender of policy: cash surrender value, paid-up policy, extended insurance. Dividend. Gross premium, net premium and Loading.



*Books recommended:*

R. E. Underwood, F. I. A.: The Elements of Actuarial Science (Pitman).

Spurgeon: Life Contingencies.

Williams: Mathematical Theory of Finance.

Mackenzie. Mathematics of Finance.

**Advanced Transport.**

*Railway Transport.*

Detailed study of Railway budget and finance.

Railway Rating and Rates structure.

Railway Statistics. Traffic Surveys. Railway Labour including Unions. Welfare schemes, and machinery for settling disputes.

Railway policy. Division of Railways.

*Books recommended:*

Srinivasan:—Railway Freight Rates.

Dr. Sir Ziauddin Ahmad: Indian Railway in Modern India.

Dr. R. Tewary: Railways in Modern India.

Mehta and Shah: Indian Railways Act IX of 1890.

Wilson, G. L.: Traffic Management.

Ripley, W. Z.: Railway Problems.

Ripley, W. Z.: Railroads, Rates and Regulations.

D. Pant: Transport Problems of India.



*Water Transport:*

*Water Transport:*—Chartering business in Sailing vessels and Steamers. Shipping Agreements and Conferences. Ship-building yards. Influence of War upon Shipping. Economics of Marine fuel. Port Economics. Maritime trade of India—Coastal and Oceanic. Indian Mercantile Marine Policy.

*Books recommended:*

S. Haji: Economics of Shipping.

Robert Edwards Annin: Ocean Shipping.

Bryson Cunningham: Port Economics.

C. Ernest Falye: The War and the Shipping Industry.

K. P. Vaidya: The Sailing Vessel Traffic.

*Air Transport:*—Economics of Air Transport. Laws relating to Aviation, Night flying. Traffic Control, Navigation. The Indian Aircraft Act. Development of air transport in U. S. A. and U. K., and its development in India. Rockets, Radar and jet propulsion. Indian Government Air Policy. Inter-planetary transport.

*Books recommended:*

F. S. Stuart and H. C. Bird: Modern Air Transport.

Dr. Edgar B. Schieldrop: Air.

**Labour Management and Industrial Relations.**

1. *Introductory:*—Chief Industrial Occupations. Relative position on the basis of the numbers engaged in different industries. Sources of Labour Supply. Social and Economic condition of the Industrial Labour, Comparative efficiency of Indian Industrial labour. Wages, Cost of living.



2. *Labour Administration*:—Labour Administration. Central and State organisations. Constitution and activities of the I. L. O. Organisations and working of International Associations and Unions—both Advisory and Administrative.

3. *Labour Legislations*.

4. *Industrial Relations*:—Organisation of Employers and Workers. Trade disputes. Trade Unions. Conciliation, Trade Board.

5. *Labour Welfare*:—Statutory and Voluntary.

6. *Labour Management*:—Vocational Selection and Training. Health and Safety and Mobility.

*Books recommended:*

Abhyankar: Labour Legislation and Security in India.

Trivedi: Labour Legislation in India.

Industrial Relation in G. B.—I. L. O. Publication.

Industrial Labour in India— I. L. O. Publication.

Radha Kamal Mukerjee: Indian Working Class.

Bombay Textile Labour Enquiry Committee Report—1938.

Cawnpore Labour Enquiry Committee Report—1938.

Bihar Labour Enquiry Committee Report—1940.

Pigou: Economics of Welfare—(Selected chapters).

Labour Commission Report.

Adarkar: Report on Social Insurance.

Lakadwala: Social Insurance.

Labour Investigation Committee Report—Rege 1946.

Indian Labour Year Book 1948-49 and 1949-50.



### Applied Statistics

This course will in the main be limited in administrative, economic and business statistics.

Statistical data relating to India will be provided during the course. Main topics which will be discussed are enumerated below :—

Collection of data—Primary and secondary sources, methods of conducting the survey. Construction of Tables, Diagrams, etc., based on original data (official or private) of statistics of trade, prices, wages, population, etc. Interpretation of population statistics such as age and sex groups, distribution in occupation, and industries population and purchasing power, statistics of Production. Index numbers. Measurement of National Income. Economic and Business Activity Indices. Time Series in Business, basic trends, seasonal variation. Business Cycles. Business Forecasting and Budgeting Marketing Analysis. Analysis of Demand. Purchasing power Index. Investment Analysis. Preparation of statistics reports. Comparison of trade statistics. Volume and value of trade. Prices and wages.

Such special methods will be dealt with in the course as are applicable to the above mentioned aspects of economic structure.

#### *Books recommended:*

Crum Patton and Tebutt: Economics Statistics.

John R. Riggleman  
and  
Ira N. Fristee } Business Statistics.

A. L. Bowley: Official Statistics.



A. L. Bowley: Nature and purpose of the measurements of social phenomena.

L. R. Connor: Statistics in Theory and Practice, Part II.

B. G. Ghate: Changes in occupational Distribution of Population.

*Committee reports:—*

Indian Economic Inquiry Committee Report.

Bowley Robertson Committee Report.

Acquaintance will be expected with the publications of Government of India Department of Statistics and Commercial Intelligence generally such as Census reports and Review of the Trade of India.

**International Trade and Foreign Exchange.**

There will be only *one* paper:—

*Trade:—*Its nature and object, factors governing its character, growth and development. Advantages of trade, Influence of foreign trade on the size and distribution of national wealth.

*Law of Comparative Costs:—*Theory of International value. Rate of Interchange. Cost of transportation.

*Balance of Trade and balance of Payments:—*Balance of indebtedness. Their size and characters. The principle of the Territorial distribution of money.

*Foreign Exchange.—*International currency, Par of exchange. Methods of quoting, Gold points. The course of exchange. Short and long exchange. Spot Rate and Forward Rate. Cross Rates, Forward exchange. The theory of purchasing Power Parity. Exchange Fluctuations—causes and correctives. Fixed and Moving Parity



Devaluation of currency. Arbitrage operation. Influence of foreign exchange on gold reserves. Indian exchange during and after the last War. Exchange Control. International Monetary Fund, Sterling Balances.

*Tariffs.*—For revenue and protection. Free Trade, Protection. Preference, Reciprocity, Subsidies and Bounties. Dumping Quotas. Retaliation, Imperial Preference, Bilateral Trade agreements. Incidence of tariffs. Tariffs in relation to Trade, Industry and National Dividend. Tariffs and monopoly. Tariffs in relation to Indian Iron, Steel, Sugar and Paper Industries. Tariff Policy.

*Books recommended:*

Bastable: Theory of International Trade.

Report of the Indian Fiscal Commission.

Thomas: Principles and Arithmetic of Foreign Exchange.

N. S. Iyer: Foreign Exchange in India.

J. C. Coyajee: Indian Fiscal Policy.

Barret Whale: International Trade.

Tariff: The case examined (edited by Sir William Beveridge and others).

Haberler: International Trade.

Taussig: International Trade.

Shenoy: Sterling Balances.

Day, H. L.: Indian Tariff Problem.

Adarker, B. N.: The Indian Tariff Policy.

Adarkar, B. P.: Fiscal Policy in India.



**M.Com. Part II.**

**Commercial Development and Industrial Organisation  
from 1800 to 1939.**

Commercial Development and Industrial Organisation (from 1800 to 1939) of England, India, Russia and U. S. A. The following topics will be discussed:—

Industrial Development, Trade and Commerce and Transport.

*Books recommended:*

Vera Anstey: Economic Development of India.

Knowles: Economic Development of Overseas Empire.

Gadgil: The Industrial Evolution of India in recent times.

World Economic Survey (latest edition).

Clive-day: History of Commerce.

Hobson: Imperialism.

Guntzel: Economic Protectionism.

Birnie: Economic History.

Ogg & Sharp: Economic Development of Modern Europe.

Dube, R. N.: Economic Development of England.

Lewis: Economic Survey 1918-31.

Savkar: Economic Development of Great Powers.

Dobb: Soviet Economic Development Since 1917.

Faulkner: American Economic History.



## Organisation and Finance of Major Industries in India.

Five of the following industries will be selected each year:—Sugar, Cotton, Iron, Jute, Coal, Tea, Heavy Chemicals. Leather, Cement, Paper, Glass.

### (i) *Sugar Industry.*

Cane Survey (Acreage and yield). Cane growing—Cane growers Associations—Cane marketing and transportation—Activities of Coimbatore, Shahjahanpur and Indian Council of Agricultural Research and Cane Development Department—crushing of cane (Kolhu and Machine)—Manufacturing of Sugar (Crystallisation and Bleaching)—Gur and Khand—Activities of Indian Sugar Syndicate, Sugar Commission and Sugar Technologist. Marketing of Sugar—Utilisation of Waste Products—Sugar Industry, its protection and central.

Labour : In the field and in the Factory.

Finance: (a) Cane Finance—from the field to the factories—activities of cane. Co-operative Societies

and (b) Factory Finance—Raising of Capital, Ratio of working Capital to the total Capital.

Aids: Central and Provincial.

Burden: Tax, cess and charge.

### *Recommended:*

Indian Sugar (Monthly).

The Indian Sugar Industry (Annual).

Annual Report of the Cane Development Department.



(ii) *Cotton Industry.*

*Its Organisation and Finance.*

The Cotton Crop—acreage, yield, the varieties of cotton and the staple length—Cotton estimates. Cotton cultivation and the operations connected with it. Comparative study of Indian conditions and those in America.

India's Cotton position—its requirements and supply—sources of supply—Government policy of meeting the cotton deficit, its criticism. The Indian Central Cotton Committee.

World raw-cotton production, consumption of raw-cotton by principal countries of the world—world competition in raw-cotton, its effects on Indian production. The progress of cotton substitutes like, Nylon, Vinyon, Protein and glass fibres. Its affect on the world cotton trade. The extent of their application in India. Cotton finance and marketing in India.

The Cotton factory industry—its history, size and importance—finance, management and employment. Distinctive features of the labour element both in the Indian and the Japanese textile industries. Taxation and Trade in textile. Government policy regarding Trade—Recommendation of the Export Promotion Committee. Export possibilities etc. Effects of partition on India's cotton trade. Trade policy with Pakistan. Trade control and licensing. Foreign competition—Reorganisation of factory industry and cotton trade.

The handloom weaving industry—its size and importance. The problem of yarn—Indian yarn production and other sources of supplies—The handicaps of the handloom—Government policy regarding handlooms. Reorganisation of handloom Industry.



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*Books recommended:*

The Indian Cotton Textile Industry (Annual).

The Indian Central Cotton Committee and its work.

The Indian Cotton Growing Review.

The Empire Cotton Growing Review.

Handbook of Textile Industry.

The Indian Textile Journal.

The Small Industries of Japan by T. Uyeda.

Handloom Weaving Industry in India, by M. P. Gandhi.

Report of the Export Promotion Committee.

*(iii) Glass Industry.*

Present position.

Raw materials—Their availability and Transport.

*(iv) Jute Industry.*

Production: Its forecast, restriction schemes:—Processes for preparation of the fibre, baling.

Jute goods.

Storage problems, Dealers and Intermediaries, markets (primary, secondary and terminal).

Credit facilities for growers.

Transportation Problems.

Grading and standardisation.

Price fixation.

Trade Associations.

Financing the Industry.

Indian Central Jute Committee.

Jute Export duty.



*Books recommended:*

J. N. Sen Gupta: Economics of Jute.

India Central Jute Committee (monthly bulletin).

Report on Marketing and Transport of Jute in India.

Report on Marketing of Jute and Jute Products.

A review of the work of the Indian Central Jute Committee 1936-1940.

Economic Analysis of the American Market for Jute and Jute Manufacturers.

Jute Substitutes.

Jute: Some Aspects of Demand and Supply.

A Review of Agricultural Investigations on Jute in India.

Jute Bulletin (Monthly).

(The above have been published by the Indian Central Jute Committee).

*(v) Iron Industry.*

Iron mines and extraction of ore, melting of ore—Conversion of pig iron into steel—Export of pig iron and import of steel and steel goods—Power problem—Duty on steel and steel goods—Tin Plate Industry—Other chemicals and minerals—Organisation of Labour and Capital Transport.

Cottage and Factory Production.

Problems of Finance, Power, Labour and Marketing.

U. P's. position *vis-a-vis* India.



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*Books recommended:*

Dr. A. Nadel: The Glass Industry in U. P.

Bulletin No. 22 of Indian Industrial Research Bureau. "A Survey of Glass Industry."

(vi) *Coal Industry*

Coal—its definition, origin and constitution—Ingredients of Coal—difference between steam coals and cooking coals—quality of Indian metallurgical coke, the problem of ash, classification of Indian coals and various coal estimates. Important Indian coal fields and their output, coal production and consumption in India and the world.

History of coal mining—the present structure of coal industry—captive collieries, collieries under the managing agents and privately owned collieries—Advantage and defects of each, other problems of ownership—sub-division and fragmentation—its defects, mining leases, *salami* etc. Disadvantages of Private ownership of mineral rights—State ownership and Management *versus* Private ownership—Rationalisation or Nationalisation.

Problem of coal industry—Coal conservation—Transport—Distribution and Marketing—Coal trade—Coal control in India—The problem of utilisation of by-products, and mechanisation of coal mines.

Labour in Coal Mines—Conditions of employment—efficiency of labour, comparative study—Labour unions and their activities—Government rules—facilities of labour welfare, etc.

*Books recommended:*

Indian Coal Problems by J. Coggin Brown.

Indian Coals (Fuel Research Institute).



Coal: Yesterday, Today and Tomorrow by Dorothy Howard Rowlands.

Report of the Coal Grading Board, 1948.

Report of the Coal Conservation Committee, 1949.

Report of the Indian Railway Fuel Committee, 1948.

Report of the Indian Coal fields Committee, 1946.

Report of the M.I.T. *Alumni* Association of India, 1949.

Report of the Indian Tariff Board Enquiry on Coals.

Report of the Indian Coal Mining Committee, 1924, 1937.

#### (vii) *Cement Industry.*

History of cement industry—Raw-material—availability of raw-material—location of industry—nearness to markets—Installed capacity.—Annual Production. Effects of partition.

Important Producers of cement—A.C.C. Ltd. and the Dalmia Group of factories—Type of A.C.C. monopoly—its causes and defects—Rate war and Price agreements—Government Control—Government policy, its criticism.

Manufacturing costs and earnings of industry. The Government Trade policy.

New Developments in the industry—bulk despatch of cement—Waste ash as substitute for cement. The Marketing company of India Ltd. A case for planned or unplanned development.

#### *Books recommended:*

The History of Indian Cement Industry issued by the A.C.C. Ltd.

Annual Reports of important producers like the A. C. C. Ltd. and the Dalmias.



## **Organisation, Finance and Regulation of International Commerce.**

*Basic Factors of International Commerce. Organisation of Export and Import Trade.*

*Sales Contract in International Commerce: Form of Contract, Commercial usage, Contract obligation relating to the nature, quality and quantity of goods. Packing, style and make up of goods. Time and place of performance. Delivery. Technique of pricing. International Auctions.*

*Economic self-sufficiency and its effects on International Commerce.*

*Financing of Foreign Trade of India, England and U. S. A.*

*Regulation of International Commerce and problems of Exchange and International Payments:—*

*Balance of Payments, Breakdown of Multilateral Trading; Quantitative Controls; Exchange Control; Devaluation; Exchange Clearing; Forward Exchange; Exchange Equalisation Account; Speculation in Exchange; Trade Agreements. Trade by barter Commodity Control, Buffer Stocks. International Monetary Fund, G. A. T. T. Havana Charter, International Trade Organisation.*

*Tariff's:—Tariffs and Balance of payment. Problems of Tariff making. Problems of Tariff working. Study of Tariff schedules. Tariffs at work in England and India.*

*Future Indian Trade Policy.*



*Books recommended:*

Haberler: International Trade.

Viner: Studies in International Trade.

Einzig: Exchange Control.

Whittacker: Foreign Exchange.

Wright: Exchange Equalisation Account.

Einzig: Theory of Forward Exchange.

Taussig: Some Aspects of the Tariff Problem.

T. Wolfe: Theory and Practice of International Commerce (dealing mainly with the financing of Foreign Trade).

Einzig: Exchange Clearing.

Docker: Foreign Exchange.

Spalding: Financing of Foreign Trade.

Hodgson: International Trade and Tariffs.

Gregory: Tariffs—a study in methods.

Hawtrey: Balance of Payment and Standard of Living.

Ellsworth: International Economics.

La Martine Yates: Commodity Control.

Ganguly: Reconstruction of Indian Foreign Trade.

Houser: Control of International Trade.

Haberler and Hill: Quantitative Trade Controls.



### **Business Administration.**

Management and Administration Physical structure and internal quality of Administrative Machinery.

Personnel Administration.

Administration of Office and technical departments.

Machinery of Control, quality Control, Budgetary Control and Financial Forecasting.

Business cycle, Price Policies and wage incentives.

Problems of poineering, location, layout, etc.

Problems of financing.

Problems of large scale business.

Government measures and policy in respect of business and industry.

Economic Planning.

Special points of administration in some select business.

Labour relations and labour problems bearing on administration.

### **Advanced Economic Theory and Analysis**

#### **1. General Economics:**

(a) Nature and significance of Economic Science: Scope and methodology.

(b) The task and method of economic analysis.

(c) The concept of Equilibrium: Static and Dynamic Equilibrium. Determinate and indeterminate Equilibrium. Partial and General Equilibrium.



2. *Theory of Value :*

- (a) Recent developments in the Theory of Consumer's Choice.
- (b) Analysis of the cost conditions of a firm and an industry.
- (c) Prices in conditions of Perfect Competition.
- (d) Prices in conditions of Imperfect competition and Monopoly.

3. *Theory of Distribution :*

- (a) Principle of Variation and the Marginal Productivity Theory.
- (b) Nature of rent and profits.
- (c) Theories of Interest.
- (d) Imperfect competition and the Theory of Distribution.
- (e) Distribution and Economic Progress.

4. The nature and Causes of Economic Fluctuations. Theorem of trade cycles. Examination of possible remedies.

5. The concept of Economic Dynamics. The Cobweb Theories. The Concept of Monetary Equilibrium.

6. The Theory of Money and Employment.

7. The concept of welfare in Economic Analysis.

*Books recommended :*

Robbins: The Nature and Significance of Economic Science.

Wicksteed: Common Sense of Political Economy.



Fraser: Economic Thought and Language.

Cannan: Review of Economic Theory.

Haberler: Prosperity and Depression.

Mead: Economic Analysis and Policy.

Keynes: General Theory of Employment, Interest  
and Money.

Hayek: Monetary Theory and Trade Cycle's Prices  
and Production.

Mitchell: Business Cycles.

Dillard: Keynesian Economics.

Strighler: The Theory of Price.

Boulding: Economic Analysis.

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## CHAPTER XV.

## DIPLOMAS.

## I.—Diplomas in Arabic and Persian.\*

## A.—ORDINANCES AND REGULATIONS.

*Board of Oriental Studies in Arabic and Persian: its Constitution and Powers.*

1. The Board of Oriental Studies in Arabic and Persian shall supervise and control the teaching Ordinances. of Arabic and Persian in the Oriental Department of the Canning College. The constitution and powers of the Board of Oriental Studies in Arabic and Persian shall be prescribed by the Ordinances and the Board shall work under the general control of the Academic Council.

2. The Board shall consist of the following *ex-officio* members:—

- (a) The members of the staff of the Arabic Department of the Faculty of Arts.
- (b) The members of the staff of the Persian Department of the Faculty of Arts.
- (c) The members of the teaching staff of the Oriental Department in Arabic and Persian.

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(1) \*The Diploma examinations in Arabic and Persian of this University are recognised by the Board of High School and Intermediate Education, U. P., as entitling the Diploma-holders to appear in English only at the High School and Intermediate Examinations of the Board.

(2) The Diploma of Fazil in Arabic and Dābir-i-Kāmil in Persian awarded by the University are added by the Board of High School and Intermediate Education, U. P., as alternatives to the qualifications required for Arabic and Persian teachers in the list of "Minimum Qualifications for Teachers" laid down by the Board.



And not more than ten members who may be co-opted by the Board as constituted above to comprise:—

- (d) Heads of three of the recognised Madrasas of Lucknow.
- (e) Three such leading Ulmas of Lucknow as are not included in the above heads.
- (f) Three such leading men of Lucknow as have special interest for Arabic and Persian Studies.
- (g) The Head of the Department of Sanskrit in the Faculty of Arts of the University.

3. The Board shall, subject to the control of the Academic Council, (i) be in-charge of all work in connection with the framing and teaching of the courses of studies and fixing the standard of examination, (ii) be responsible for the general efficiency of the Department, and (iii) have the following powers:—

- (a) To constitute sub-committees for admission of students to the Department and for recommending courses of studies.
- (b) To recommend to the Academic Council the courses of studies for the different examinations of the Oriental Department in Arabic and Persian after consulting the Sub-committees of Courses and Studies concerned.
- (c) To recommend to the Academic Council the conditions for award of diplomas, titles, and other distinctions.



- (d) To make such other recommendations to the Academic Council as the Board may think necessary to the efficiency or improvement of the Department.

4. Members of the Board shall hold office for two years: provided that the Academic Council may fill any casual vacancy in accordance with the provisions of Section 41 of the Act.

### Sub-Committees.

1. The Board of Oriental Studies shall appoint the following Sub-Committees:—

Regulations.

- (a) A Sub-committee for Admission.
- (b) A Sub-committee for Courses and Studies in Arabic.
- (c) A Sub-committee for Courses and Studies in Persian.

2. The Sub-committees for Courses and Studies shall consist of not more than nine members.

3. The Sub-committee for Admission shall consist of not more than five members.

4. The elected members of the Sub-committees (a), (b) and (c), shall hold office for a period of two years: provided that any casual vacancy may be filled by the Board of Oriental Studies with the due approval of the Academic Council.

### Admission.

1. Admission of students to the Oriental Department shall be made by the Sub-committee for Admission.

Ordinances.



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2. Only such students shall be eligible for admission as are certified by the Head of a recognised Madrasa, or by a member of the Court of the Lucknow University, or by a member of the Board of Oriental Studies to possess a good moral character.

3. All applicants shall present themselves before the Admission Sub-committee for such examination as it may deem fit.

4. The Admission Sub-committee shall consider each application and admit only such candidates as it may consider fit for admission.

5. No Tuition fee shall be charged from the students of the Oriental Department.

\*6. Students admitted to the Oriental Department must attend 75% of the lectures in order to be eligible to appear at the Oriental Diploma examinations. The Vice-Chancellor may, on the recommendation of the Convener, Board of Oriental Studies in Arabic and Persian, condone a shortage of attendance up to 15 lectures.

1. Application for admission in the prescribed form together with the certificate required by Ordinances No. 2, shall be made to the Registrar on or before July 27.

2. All applications shall be submitted by the Registrar to the Admissions Sub-committee which shall meet on July 30, at the Canning College to consider them.



## Examinations.

### A. — GENERAL.

1. There shall be three Diploma examinations in Ordinances. Arabic and three in Persian and shall be called:—

*Arabic*—(1) Maulvi,\* (2) Alim, (3) Fazil.

*Persian*—(1) Dabir,\* (2) Dabir-i-Mahir.  
(3) Dabir-i-Kamil.

2. Each Diploma shall carry with it the appropriate title which its holder shall be entitled to use with his name.

3. All the subjects prescribed for the three examinations in Persian and the two examinations in Arabic, namely, Maulvi and Alim, shall be compulsory.

4. The Fazil course shall be one of specialised study and any one of the following subjects may be selected by the student for his special study:—

(1) General Literature.

(2) Quranic Literature.

(3) Hedith.

(4) Fiqh.

(5) (Theology and Philosophy.

(6) History.

5. A student after taking the Diploma of Fazil in one subject may study for the Diploma of Fazil in another subject.

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\*Maulvi and Dabir examinations have been suspended, (*vide* Executive Council Resolution No. 7 dated March 15, 1929).



6. On religious subjects the text-books prescribed for Shia and Sunni students shall be different.

7. The University will provide for the teaching of the courses of studies for several Diploma examinations in the Oriental Department so far as the teaching staff at its disposal permits.

At present teaching is provided by the University for the following Diplomas only:—

Regulations.

- (i) Fazil (a) Literature.  
(b) Tafsir.
- (ii) Alim.
- (iii) Dabir-i-Mahir.
- (iv) Dabir-i-Kamil.

#### B.—TERMINAL EXAMINATIONS.

Ordinance. The results of the Terminal examinations shall be recorded with the Convener of the Board of Oriental Studies in Arabic and Persian and shall be considered in bringing out the results of the examinations.

Regulations. 1. Every student of the Oriental Department shall appear at the Terminal examinations which shall be held as follows:—

- (a) The 1st Terminal examination shall be held about the beginning of the 2nd term.
- (b) The 2nd Terminal examination shall be held about the beginning of the 3rd term.



2. Absence from the examination shall be reckoned as failure in the examination.

C.—APPOINTMENT OF EXAMINERS.

The names of examiners for Oriental Department Ordinances. shall be recommended by a Committee, the constitution of which shall be:—

- (a) Convener of the Board of Oriental Studies.
- (b) One member elected by the Academic Council.
- (c) One member elected by the Sub-committee of Courses and Studies in Arabic (Oriental Department).
- (d) One member elected by the Sub-committee of Courses and Studies in Persian (Oriental Department).

D.—MODERATION OF QUESTION-PAPERS.

(a) Moderation of question-papers in Arabic (Fazil) Ordinances. and Alim Examinations) shall be done by a Committee consisting of:—

- (1) Head of the Department of Arabic.
- (2) One representative of the Board of Oriental Studies, and
- (3) One representative of the Sub-committee of Courses and Studies in Arabic.

(b) Moderation of question-papers in Persian (Kamil and Mahir Examinations) shall be done by a Committee consisting of:—

- (1) Head of the Department of Persian.
- (2) One representative of the Board of Oriental Studies, and



- (3) One representative of the Sub-committee of Courses and Studies in Persian.

E.—DIPLOMA EXAMINATIONS IN ARABIC AND PERSIAN.

\*1. The following classes of candidates may be admitted to the Diploma examinations in Arabic and Persian.

- Ordinances.
- (i) Students who have received instruction under the Oriental Department for the Diploma examination.
  - (ii) Teachers in Schools, Ma lrasas, Maktabas, or other recognised public educational institutions, situated within the territorial jurisdiction of the University.

2. Candidates shall not be admitted to the Diploma examinations in Arabic and Persian unless they have satisfied the Board of Oriental Studies:—

- (a) That they are fit by their studies to sit for the examination for which they are candidates.
- (b) That they possess a good moral character.
- (c) That they have fulfilled all the conditions laid down on this behalf by the University.

(3). Candidates intending to appear at the Diploma examinations in Arabic and Persian under Ordinance No. 1 (ii) shall obtain permission to appear at the examination before October 15.

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\*No student taking up any of the lower Diploma examinations in Arabic and Persian is allowed to appear at any of the higher examinations in the same subject unless he has passed all the previous examinations.



### B.—SCHEME OF EXAMINATION.

The examinations for Diplomas in Arabic and Persian shall be by means of papers.

2. Each paper shall be of three hours' duration and the maximum marks for each paper shall be 100.

3. The medium of examination shall be Urdu. Some questions may be set and answers required in Arabic or Persian.

4. In order to pass candidates must obtain 33 per cent of the aggregate marks in each paper.

5. Names of successful candidates shall be arranged in three divisions. Candidates who obtain 60 per cent or upwards of the aggregate marks shall be placed in the *First* division. Candidates who obtain 48 per cent or upwards of the aggregate marks shall be placed in the *Second* division. Candidates who obtain 36 per cent or upwards of the aggregate marks shall be placed in the *Third* division. Names of candidates placed in the same division shall be arranged in alphabetical order.

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### C.—COURSES OF STUDY.

نصاب امتحانات عربی و فارسی لکھنؤ

یونیورسٹی منظور شدہ مجالس شوری

شعبہ السنہ مشرقیہ

عربی کے تین امتحان ہونگے (۱) مولوی (۲) عالم (۳) فاضل—

#### (۱) امتحان مولوی

اس امتحان میں چھ پرچے ہونگے—تیسرا—چوتھا اور پانچویں پرچہ کا جزو (ب) شیعہ اور سنی طالبہ کے لئے علیحدہ علیحدہ ہو گا— اور باقی پرچے مشترک ہونگے—

پہلا پرچہ ادب—اطباق الذهب لعبد المومن الاصفہانی دیوان سیدنا علی عایہ السلام (مذتخب انوار المطابع لکھنؤ) بدیع و انشا

دوسرا پرچہ—صرف—فصول اکبری—تمام  
نحو—کافیہ—تمام

تیسرا پرچہ—(سنی طالبہ کے لئے) قرآن کریم—سورۃ بقرہ

و تفسیر جلالین سورۃ آل عمران

حدیث—بلوغ المرام

(سنی طالبہ کے لئے) قرآن کریم—سورۃ بقرہ

تفسیر صافی سورۃ آل عمران

حدیث—جامع الاخبار—



- چوتھا پرچہ—(سنی طالبہ کے لئے)—فقہ—قدوری—تمام  
 عقائد—تکمیل الایمان—تمام  
 (شیعہ طالبہ کے لئے)—فقہ—بدایہ—تمام  
 عقائد—شرح باب حادی عشر—تمام  
 پانچواں پرچہ—(الف)—منطق—شرح تہذیب—تمام  
 (ب) تاریخ (سنی طالبہ کے لئے) دول العرب  
 والا سلام—تمام  
 (شیعہ طالبہ کے لئے) ارشاد شیخ مفید علیہ الرحمہ—تمام  
 چھٹا پرچہ—ترجمتین—

## (۲) امتحان عالم

اس امتحان میں چھ پرچے ہونگے—تیسرا اور چوتھا پرچہ  
 شیعہ اور سنی طالبہ کے لئے علیحدہ علیحدہ ہوگا اور باقی پرچے مشترک  
 ہونگے—

پہلا پرچہ—الادب المنظوم—

(۱) معلقہ عمرو بن کلثوم—

(۲) دیوان الحماسة (باب النسیب باب المراثی و باب الادب)—

(۳) مجموع الادب (باستثنای عروض)—

دوسرا پرچہ—الادب المنثور—

(۱) رسائل الخوارزمی (نصف اول)—

(۲) مقامات بدیع از مقامہ اول تا مقامہ ۵ (مطابق مطبع

مجیدی کانپور)—

(۳) دمعۃ وابتسامۃ لخلیل جبران—



تیسرا پرچہ — مندرجہ ذیل مضامین میں سے کوئی ایک: —

(الف) قرآن و تفسیر (ب) حدیث (ج) فقہ اصول فقہ و فرائض  
ان مضامین کے لئے مندرجہ ذیل کتابیں مقرر کی گئی  
ہیں: —

سنی طالبہ کے لئے: —

(الف) سورۃ بقرہ و آل عمران - ترجمہ و مطالب کے لئے تفسیر جلالین -  
(ب) جامع ترمذی (عبادات و اخلاق) -  
(ج) (۱) نور الانور (بحث کتاب) -  
(۲) شرح و قایہ (جلد اول تا کتاب الحج) -  
(۳) سراجیہ -

شیعہ طالبہ کے لئے: —

(الف) سورۃ بقرہ و آل عمران ترجمہ و مطالب کے لئے تفسیر الصافی -  
(ب) الکافی (کتاب الفضل والعلم والعشرۃ) -  
(ج) (۱) معالم الاصول (تالمطالب الخامس فی الاجماع) -  
(۲) شرائع الاسلام (النکاح والمیراث) -

فی الحال صرف (الف) یعنی قرآن و تفسیر میں امتحان لیا  
جاتا ہے۔

چوتھا پرچہ منطق -

مندرجہ ذیل کتابیں مقرر کی گئی ہیں: —  
(۱) الاستدلال (مرزا سجاد بیگ) -  
(۲) شرح التہذیب -



پانچواں پرچہ — تاریخ ادب العرب —

مندرجہ ذیل کتابیں مقرر کی گئی ہیں: —

(۱) ادب العرب از زبید احمد —

(۲) المعجم فی تاریخ ادب العرب —

چھٹا پرچہ — (۱) انشائی عربی (۴۰ نمبر) —

(۲) ترجمتین (۶۰ نمبر) —

کتاب کلید و دمنہ عربی سے اردو میں ترجمہ کے لئے بطور معیار

تجویز کی جاتی ہے۔

## امتحان فاضل

فاضل کا امتحان ان چھ مضامین میں ہوگا (۱) ادب (۲) تفسیر  
(۳) حدیث (۴) فقہ و اصول فقہ (۵) معقولات (۶) تاریخ — ہر  
امیدوار کو صرف ایک ہی مضمون میں امتحان دینا ہوگا — اور اگر کامیاب  
ہو تو اُسے اُس مضمون کے فاضل کا خطاب دیا جائیگا — لیکن وہ مجاز  
ہوگا کہ دوسرے سال دوسرے مضمون میں امتحان دے — ہر مضمون کے  
امتحان میں پرچوں کی تعداد حسب ذیل ہوگی —

## فاضل ادب

پہلا پرچہ — الادب المنظوم —

(۱) دیوان الحماسہ (باب اول) فصاف آخر از البرج بن

مسهر الطائی —

(۲) قصیدۃ بانفت سعاد —

(۳) لامیۃ العرب —



(۴) مندرجہ ذیل (۱۰) دس قصائد المتنبی:—

من العاذر فی زی الاعارب—

بابی الشہوس الجانحات غواربا—

الیوم عهد کم فاین الموعد—

عواذل ذات الخال فی حواسد—

طوال قذا تطا عنہا قصار—

ہدی برزت لنا فہجت رسیسا—

حشاشۃ نفس ودعت یوم ودعوا—

ہوالبدین حتی ماتانی العزائق

واحر قلباہ ممن قلبہ شیم—

علی قدر اهل العزم تاقی العزائم—

دوسرا پرچہ— الادب المذکور—

(۱) نہج البلاغۃ: کتب تمام و خطبہ عجیبہ خطبۃ الاشباح  
خطبۃ الطائوس—

(۲) مقامات الحریری (مقامات ۲۵—۱۱)

تیسرا پرچہ— تنقید و عروض

مندرجہ ذیل کتابیں مقرر کی گئی ہیں:—

(۱) فقد الشعر لقد امة بن جعفر—

(۲) تلخیص المفتاح—

(۳) محیط الدائرة—

چوتھا پرچہ— تاریخ ادب العرب—

مندرجہ ذیل کتابیں مقرر کی گئی ہیں:—

(۱) الشعر والشعراء لابن قتیبہ—

(۲) تاریخ ادب اللغة العربیة احسن زیات—

پانچواں پرچہ— الادب الجدید—

المتحف العربی لسید علی نقی الذقوی—

چھٹا پرچہ— انشاء عربی—



## فاضل تفسیر

۱۔ سنی طلبہ کے لئے

پرچہ اول۔ القرآن المجید مع تفسیر الجلالین  
پرچہ دوم۔ الاتقان فی تاریخ علوم القرآن انواع ۱، ۷، ۸، ۹، ۱۶،  
۲۵، ۳۰، ۶۰، ۶۳، ۶۷

پرچہ سوم۔ تفسیر بیضاوی سورۃ بقرہ فقط  
پرچہ چہارم۔ الکشاف۔ سورۃ آل عمران فقط  
پرچہ پنجم۔ أصول التفسیر۔ الفوز الکبیر  
پرچہ ششم۔ کتاب الذکات فی اعجاز القرآن المر مانی  
(ب) شیعہ طلبہ کے لئے

پرچہ اول۔ القرآن المجید مع تفسیر الاصفی  
پرچہ دوم۔ جوامع الجامع۔ سورۃ بقرہ  
پرچہ سوم۔ مجمع البیان۔ سورۃ آل عمران  
پرچہ چہارم۔ امالی علم الہدی۔ مایتعلق بالتفسیر  
پرچہ پنجم۔ مقدمۃ التفسیر لمولوی علی نقی النقوی  
پرچہ ششم۔ الصافی المقدمہ فقط

## فاضل حدیث

سنی طلبہ کے لئے

پرچہ اول۔ صحیح بخاری نصف اول  
پرچہ دوم۔ صحیح بخاری نصف دوم  
پرچہ سوم۔ صحیح مسلم نصف اول  
پرچہ چہارم۔ صحیح مسلم نصف دوم



پرچہ پنجم—شرح معانی الآثار للطحاوی (نصف اول)

پرچہ ششم—(الف) اصول حدیث : نزہۃ النظر

(ب) مضمون بر تدوین حدیث (ماخذ حجة الله البالغة)

شیعہ طلبہ کے لئے

پرچہ اول—اصول الکافی از اول تا باب اصناف الناس

پرچہ دوم—(الف) اصول الکافی از ابتداء باب الکفر تا آخر کتاب

(ب) فروع کافی از کتاب الطہارۃ تا ابتداء ابواب الصيد

پرچہ سوم—من لا یحضرہ الفقیہ (نصف اول)

پرچہ چہارم—من لا یحضرہ الفقیہ (نصف آخر)

پرچہ پنجم—مناقب ابن شہر آشوب (جلد اول و دوم و سوم)

پرچہ ششم—(الف) اصول حدیث : و جیزۃ

(ب) الشیعہ و فنون الاسلام : حصہ متعلقہ حدیث

## فاضل فقہ

سنی طلبہ کے لئے

پرچہ اول—ہدایہ جلد ثالث

پرچہ دوم—ہدایہ جلد رابع

پرچہ سوم—منتقى الأبحر مقدمہ در المختار

پرچہ چہارم—توضیح تمام

پرچہ پنجم—تاریخ من، اولہ الی آخر المقدمات الاربع مسام الثبوت

پرچہ ششم—احوال ائمہ



شیعہ طالبہ کے لئے

پرچہ اول—شرح اللعة (العبادات)

پرچہ دوم—الشرح الكبير كتاب الطهارة الى آخر مباحث الوضوء كتاب  
الصلوة الى آخر مقدمات الصلوة

پرچہ سوم—المكاسب للشيخ مرتضى (منتخب)

پرچہ چہارم—قوانين اصول من اوله الى آخر باب الاوامر والنواهي

پرچہ پنجم—الفصول الفروعیہ مباحث الاجتهاد والتقليد والاجماع

پرچہ ششم—الوسائل للشيخ مرتضى مباحث القطع والظن

## فاضل معقولات

پرچہ اول—ملا حسن و حمد الله

پرچہ دوم—صدرا قدر مطبوع

پرچہ سوم—شرح حكمة العيون

پرچہ چہارم—شرح الاشارات للطوسي

کلام سنی طالبہ کے لئے

پرچہ پنجم—شرح مقاصد

پرچہ ششم—میر زاهد امور عامہ

کلام شیعہ طالبہ کے لئے

پرچہ پنجم—احقاق الحق

پرچہ ششم—عماد الاسلام شرح تجرید



## فاضل تاریخ

- پرچہ اول—مروج الذهب للمسعودی عهد الجاهلیة  
 پرچہ دوم—السيرة لابن هشام  
 پرچہ سوم—ابو الفدا جلد اول و دوم  
 پرچہ چہارم—ابو الفدا جلد سوم و چہارم  
 پرچہ پنجم—(شیعہ طالبہ کے لئے) اعلام الوری  
 (سنی طالبہ کے لئے وفاء الوفاء)  
 پرچہ ششم—تاریخ اداب اللغة العربیہ

## (ب) امتحانات فارسی

- فارسی کے تین امتحانات ہونگے (۱) دبیر (۲) دبیر ماہر  
 (۳) دبیر کامل

## (۱) امتحان دبیر

- پرچہ اول—(الف) سکندر نامہ نظامی (جنگ سکندر و نادرا)  
 (ب) بدائع سعدی (پہلی سو غزلیں)  
 پرچہ دوم—نثر بہارستان جامی  
 پرچہ سوم—رقعات عالمگیری  
 (الف) ہمایوں نامہ (تمام)  
 (ب) احسن القواعد (مطبع مجتبائی دہلی)  
 پرچہ چہارم—شعر العجم (حصہ پنجم)  
 پرچہ پنجم—المطالعة العربیہ لطالعت حرب  
 کتاب الصرف مولفہ حافظ عبدالرحمن امرتسری  
 پرچہ ششم—ترجمتین



## (۲) امتحان دبیر ماهر

پرچہ اول — نظم

(۱) شعری کتابستان (الہ آباد)

(الف) (انوری عرفی قاضی) قصائد

(ب) (نظامی-رومی-امیر خسرو-فیض فردوسی) مثنویات

(ج) غزلیات (تمام)

حدائق البلاغة-فن بدیع

پرچہ دوم — نثر قدیم (الف) انوار سہیلی باب اول و دوم

(ب) چہار مقالہ (تمام)

(ج) اخلاق محسنی (پہلے تہذیب ۳۳ باب)

پرچہ سوم — نثر جدید (الف) نامہ خسروان — تا اختتام احوال ساسانیان

(ب) آخرین یادگار نادر شاہ

(ج) ہما : حسین کاظم زادہ

پرچہ چہارم — تاریخ ادب (۱) شعر العجم حصہ اول و دوم

(۲) مآثر عجم : ایم-اے-ایچ-جنیدی

پرچہ پنجم — عربی — ”سلم الادب“ —

کتاب النحو — مولفہ حافظ عبدالرحمن

پرچہ ششم — مضمون نویسی و ترجمہ از اردو بفارسی

## (۳) امتحان دبیر کامل

پرچہ اول — نظم قدیم و عروض و قافیہ

(الف) غزلیات حافظ (ردیف باء)

(ب) غزلیات نظیری ردیف الف و ب

(مبارک علی (لاہور)

(ج) فلسفہ خیام (ایس-ایم-بی-شمس)



## ( د ) قصائد خاقانی:—

- ۱—ہر صبح سر بگلشن سودا بر آورم
- ۲—جوشن صورت برون کن در صف مردان درا
- ۳—صبحدم چون کلمہ بزد آہ دود آسائے من
- ۴—سریر فقر ترا سر کشد بتاج رضا
- ۵—سنت عشاق چیست برگ عدم ساختن

## قصائد عرفی:—

- (۱) ای متاع درد در بازار جان انداختہ
- (۲) چہرہ پر داز جہان رخت کشد چون بہمل
- (۳) عادت عشاق چیست برگ عدم ساختن
- (۴) صبح عید کہ در تکیہ گاہ ناز و نعیم
- (۵) زخود گردیدہ بر بندی چہ گویم کام جان بینی
- (۶) ہر سوختہ جانی کہ بکشمیر در آید
- (د) (داستان سہراب و رستم) شاہنامہ
- (ز) حدائق البلاغہ : عروض و قافیہ

پرچہ دوم—نظام جدید و علم بیان—

(الف) گلہائے بہار مولفہ ڈاکٹر غلام سرور—

(ب) حدائق البلاغہ (بیان)—

پرچہ سوم—نثر قدیم

(الف) سہ نثر ظہوری نثر اول

(ب) دفتر ابوالفضل اول—نصف اول

(ج) وقائع نعمت خان عالی نصف اول

(د) اخلاق ناصری—مقالہ اول قسم دوم چہارم



پرچہ چہارم — نثر جدید

(الف) بیست مقالات قزوینی حصہ اول

(ب) رہبر نژاد نو

پرچہ پنجم — تاریخ ادب

(الف) شعرا العجم حصہ سوم و چہارم ما سوا باب اول

(ب) صنادید عجم

پرچہ ششم — عربی

(الف) دیوان سیدنا علی (منتخب مطبوعہ انور المصباح)

(ب) نفحة الیمن باب اول

پرچہ ہفتم — مضمون و ترجمہ از اردو فارسی



## II.—Diplomas in Sanskrit\*

### A.--ORDINANCES AND REGULATIONS.

#### *Board of Oriental Studies in Sanskrit: its Constitution and Powers.*

1. The Board of Oriental Studies in Sanskrit shall supervise and control the teaching of Sanskrit in the Oriental Department of the Canning College. The constitution and powers of the Board of Oriental Studies in Sanskrit shall be prescribed by the Ordinances and the Board shall work under the general control of the Academic Council.

2. The Board shall consist of the following *ex-officio* members:---

(a) The members of the staff of the Sanskrit and Prakrit Languages, and Hindi Departments of the Faculty of Arts.

(b) The members of the teaching staff of the Oriental Department in Sanskrit.

And not more than eleven members who may be co-opted by the Board as constituted above to comprise:—

(c) The Convener of the Board of Oriental Studies in Arabic and Persian.

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\* (1) The Diploma examinations in Sanskrit of this University are recognised by the Board of High School and Intermediate Education, U. P. as entitling the Diploma-holder to appear in English only at the High School and Intermediate examinations of the Board.

(2) The Diploma examinations in Sanskrit of this University are recognised by the Board of High School and Intermediate Education, U. P., and included in the list of "minimum qualifications" required of teachers in Sanskrit in High Schools and Intermediate Colleges.



- (d) Two Pandits from two recognized educational institutions of Lucknow.
- (e) Two such leading Pandits as are not included in the above heads.
- (f) Four such leading men, of whom three must belong to Oudh, as have special interest in Sanskrit Studies.
- (g) Two eminent Sanskrit Scholars.

The Head of the Department of Sanskrit shall be the Convener of the Board.

3. The Board shall, subject to the control of the Academic Council, (i) be in-charge of all work in connection with the framing and teaching of the courses of studies and fixing the standard of examination, (ii) be responsible for the general efficiency of the Department, and (iii) have the following powers:—

- (a) To constitute sub-committees for admission of students to the Department and for recommending courses of studies.
- (b) To recommend to the Academic Council the courses of studies for the different examinations of the Oriental Department in Sanskrit after consulting the Sub-committee of Courses of Studies.
- (c) To recommend to the Academic Council the conditions for award of scholarships, diplomas, titles, and other distinctions.
- (d) To make such other recommendations to the Academic Council as the Board may think necessary for the efficiency or improvement of the Department.



4. Co-opted members of the Board shall hold office for two years: provided that the Academic Council may fill any casual vacancy in accordance with the provisions of Section 41 of the Act.

### Sub-committees.

1. The Board of Oriental Studies in Sanskrit shall Regulations. appoint the following Sub-committees:—

(a) A Sub-committee for Admission.

(b) A Sub-committee for Courses and Studies.

2. The Sub-committee for Courses and Studies shall consist of not more than nine members.

3. The Sub-committee for Admission shall consist of not more than five members.

4. The elected members of the Sub-committees (a) and (b) shall hold office for a period of two years: provided that any casual vacancy may be filled by the Board of Oriental Studies with the due approval of the Academic Council.

### Admission.

1. Admission of students to the Sanskrit Section, Ordinance. Oriental Department, shall be made by the Sub-committee for Admission.

2. Only such students shall be eligible for admission as are certified by the head of a recognized Pathshala, or by a member of the Court of the Lucknow University, or by a member of the Board of Oriental Studies in Sanskrit, to possess a good moral character.

3. All applicants shall present themselves before the Admission Sub-committee for such examination as it may deem fit.



4. The Admission Sub-committee shall consider each application and admit only such candidates as it may consider fit for admission.

5. No Tuition fee shall be charged from the students of the Oriental Department.

\*6. Students admitted to the Oriental Department must attend 75% of the lectures in order to be eligible to appear at the Oriental Diploma Examinations. The Vice-Chancellor may, on the recommendation of the Convener, Board of Oriental Studies in Sanskrit, condone a shortage of attendance up to 15 lectures.

1. Application for admission in the prescribed form together with the certificate required Regulations. by Ordinance No. 2, shall be made to the Registrar on or before the 16th of July.

2. All applications shall be submitted by the Registrar to the Admission Sub-committee which shall meet on the 17th of July at Canning College to consider them.

### Examinations.

#### A.—GENERAL.

(1) There shall be two Diploma examinations in Ordinances. Sanskrit: Shastri and Acharya.

(2) The Shastri course shall aim at giving the student a general education in Shastri learning and some knowledge of Hindi.

(3) The Shastri examination shall consist of two Parts—Part I and Part II.

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\*In force with effect from the Session 1950-51.



(4) Only those will be admitted to the Part I of the Shastri examination who have (1) already passed the Madhyama examination of the Benares Sanskrit College, or of the Benares Hindu University, or of the Bihar Sanskrit Association, or of the Calcutta Sanskrit Association, or the Visarada examination of the University of the Punjab, or the Sanskrit examination of the Jaipur Sanskrit College, or the B. A. examination with Sanskrit as one of the subjects of any recognised Indian University, or any other examination which may be recognised to be equivalent to the above by the Board of Oriental Studies in Sanskrit, and (2) who have subsequently completed a regular course of study in the Oriental Department for not less than one academic year:

Provided that those who have failed in the Shastri examination held in April 1944 may appear together in Parts I and II of the Shastri examinations in any subsequent year.

(5) Part II of the Shastri examination shall be open to students who have, since passing Part I, prosecuted a regular course of study in the Oriental Department for not less than one academic year immediately preceding the year of examination.

(6) Divisions shall be awarded on the combined results of Parts I and II of the Shastri examinations.

(7) The Acharya course shall aim at specialisation in one or more branches of Sanskrit learning. The subjects recognised for the Acharya examination are the following:—

Veda.

Kavya-Sahitya.

Vyakarana.



Nyaya.  
Vedanta.  
Sankhya.  
Yoga.  
Mimamsa.  
Vaisesika.  
Jyotisa.  
Ayurveda.

(8) The University will provide for the teaching of the course of studies for the two Diploma examinations in the Sanskrit Section, Oriental Department, as far as the teaching staff at its disposal permits.

(9) The Acharya examination shall consist of two Parts—Part I and Part II.

(10) Only those will be admitted to the Acharya Part I examination who have (1) passed the Shastri examination of the University of Lucknow, or of the Benares Hindu University, or of the Punjab University, or the Bihar Sanskrit Association, or the Tirtha examination of the Calcutta Sanskrit Association, or the B. A. examination of any recognized Indian University with 1st Division marks in Sanskrit, and (2) who have subsequently completed a regular course of study in the Oriental Department for not less than one academic year.

Provided that those who have failed in the Acharya examination Part I of April 1944 may be permitted to appear in Part I examination of any subsequent year.

(11) Part II of the Acharya examination shall be open to students who have, since passing Part I of the examination, prosecuted a regular course of study in the Oriental Department for not less than one academic year immediately preceding the year of examination.



(12) Division shall be awarded on the combined results of Part I and II of the Acharya examinations.

(13) Each Diploma shall carry with it the appropriate title which its holder shall be entitled to use with his name.

### B.—TERMINAL EXAMINATIONS.

The results of the Terminal examinations shall be recorded with the Convener of the Board of Ordinance. Oriental Studies in Sanskrit and shall be considered in bringing out the results of the Diploma examinations.

1. Every student of the Oriental Department shall appear at the Terminal examinations which Regulations. shall be held as follows:—

(a) The 1st Terminal examination shall be held about the beginning of the 2nd term.

(b) The 2nd Terminal examination shall be held about the beginning of the 3rd term.

2. Absence from the examination shall be reckoned as failure in the examination.

### C.—APPOINTMENT OF EXAMINERS

The names of examiners for the Sanskrit Section, Oriental Department, shall be recommended Ordinance. by a Committee, the constitution of which shall be:—

(a) Convener of the Board of (Oriental Studies in Sanskrit.

(b) One member elected by the Academic Council.

(c) One member elected by the Sub-committee of Courses and Studies in Sanskrit (Oriental Department).



### D.—MODERATION OF QUESTION-PAPERS.

Moderation of question-papers shall be done by a Sub-committee consisting of the Head of the Department of Sanskrit in the Faculty of Arts and two members elected by the Board of Oriental Studies in Sanskrit.

### E.—DIPLOMA EXAMINATIONS IN SANSKRIT.

\*1. The following classes of candidates may be admitted to the Diploma examinations in Sanskrit:—

- (i) Students who have received instruction under the Oriental Department for the Diploma examination.
- (ii) Teachers in Schools, Pathshalas, or other recognized public educational institution, situated within the territorial jurisdiction of the University.

2. Candidates shall not be admitted to the Diploma examinations in Sanskrit unless they have satisfied the Board of Oriental Studies in Sanskrit:

- (a) That they are fit by their studies to sit for the examination for which they are candidates.
- (b) That they possess a good moral character.
- (c) That they have fulfilled all the conditions laid down on this behalf by the University.

3. Candidates intending to appear at the Diploma examination in Sanskrit under Ordinance No. 1 (ii) shall obtain permission to appear at the examination before the 15th of October.

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\*No student taking up any of the lower Diploma examinations in Sanskrit is allowed to appear at any of the higher examinations in the same subject unless he has passed all the previous examinations.



### B.—SCHEME OF EXAMINATION.

1. The examination for Diploma in Sanskrit shall be by means of papers.

2. Each paper shall be of three hours' duration and the maximum marks for each paper\* shall be 100.

3. The medium of examination shall be Sanskrit. Some questions may be set and answers required in Hindi.

4. In order to pass, candidates must obtain at least 33 per cent of the marks in each paper.

5. Name of successful candidates shall be arranged in three divisions. Candidates who obtain 60 per cent or upwards of the aggregate marks shall be placed in the *First* division. Candidates who obtain 48 per cent or upwards of the aggregate marks shall be placed in the *Second* division. Candidates who obtain 36 per cent or upwards of the aggregate marks shall be declared to have passed. Names of candidates placed in the same division shall be arranged in order of merit.

\*The allotment of marks in Paper III of the Shastri examination shall be as follow:—

Sahityadarpana	....	....	....	50
Vrittaratnakara	....	....	....	25
Kadambari (Kithamukha)	....	....	....	25



## C.—COURSES OF STUDY.

## शास्त्री प्रथम खण्ड

इसमें चार प्रश्नपत्र होंगे ।

प्रथम प्रश्नपत्र—सिद्धान्त कौमुदी ( पूर्वाद्ध ) \* ?

द्वितीय प्रश्नपत्र—ऋग्वेद ( १ ) १६; २५; १४३; १५४  
( २ ) १२ ( ३ ) ५६; ६१ ( ४ ) ४६; ५४ ( ५ ) २६; ८३  
( ६ ) ५३; ५४; ५५; ५६ ।

ऐतरेय ब्राह्मण ( डा० लड्डू के चुने हुए भाग )

स्वर या वैदिकी प्रक्रिया के सूत्रों का ज्ञान भी अपेक्षित होगा,  
जिनकी कि मन्त्रों में आवश्यकता है ।

तृतीय प्रश्नपत्र—शिशुपालवध ३—४ सर्ग

किराताजुनीय ४—५ सर्ग

उत्तररामचरित

नैषध १—२ सर्ग

चतुर्थ प्रश्नपत्र—सिद्धान्त, मुक्तावली प्रत्यक्ष खण्ड से शब्द-

खण्डान्त, वेदान्तसार

शास्त्री द्वितीय खण्ड

इसमें चार प्रश्नपत्र होंगे ।

टिप्पणी\*—जो विद्यार्थी १९४६ की शास्त्री परीक्षा में असफल हुए हैं उनके लिए प्रथम खण्ड के प्रथम पत्र सिद्धान्त कौमुदी ( पूर्वाद्ध ) के स्थान पर लघुपाणिनीय ( पृ० १—२४५ तक ) पाठ्य होगा !

और

जो विद्यार्थी १९४४ की शास्त्री परीक्षा में असफल रहे हैं उनके लिये द्वितीय खण्ड के प्रथम पत्र में सिद्धान्त कौमुदी ( उत्तराद्ध ) के स्थान में लघुपाणिनीय भी ( पृ० २४५—४३६ तक ) पाठ्य होगा ।



प्रथम प्रश्नपत्र—सिद्धान्त कौमुदी, उत्तराद्ध, ( स्वर, वैदिकी-  
प्रक्रिया और उणादि को छोड़कर )

द्वितीय प्रश्नपत्र—साहित्यदर्पण १, २, ४, १० परिच्छेद  
वृत्तरत्नाकर  
कादम्बरी ( कथामुख )

तृतीय प्रश्नपत्र—सांख्य-योग-मीमांसा अथवा ज्योतिष ।  
सांख्य-योग-मीमांसा में सांख्यकारिका गौड़-  
पाद की टीका सहित; योगसूत्र भोजचंद्रिका-  
सहित; अर्थसंग्रह ।

\* ज्योतिष में—बृहज्जातक १ से १० अध्याय तक  
लघुपाराशरी  
नीलकंठी संज्ञातंत्र  
षट्पञ्चाशिका

चतुर्थ प्रश्नपत्र—संस्कृत साहित्य का इतिहास ४० अंक  
अनुवाद २० ,,  
निबन्ध २० ,,  
अपठित २० ,,

व्याकरणाचार्य परीक्षा

प्रथम खण्ड

सन् १९५२ की परीक्षा के लिए

इसमें ३ प्रश्नपत्र होंगे ।

नियत पुस्तकें—

प्रथम प्रश्नपत्र—प्रौढमनोरमा ( अव्ययीभावान्त )  
वैयाकरणभूषणसार

\* ज्योतिष का विकल्प अध्यापन के लिये प्रबन्ध अगर हो  
सकेगा तभी लिया जा सकता है ।



द्वितीय प्रश्नपत्र—महाभाष्य—नवाह्निक

परमलघुमञ्जूषा

तृतीय प्रश्नपत्र—नैषध ३-६

शाकुन्तलम्

मृच्छकटिकम्

प्राकृतप्रकाश

### द्वितीय खण्ड

सन् १९५२ के लिए

प्रथम प्रश्नपत्र—परिभाषेन्दुशेखर

व्युत्पत्तिवाद—प्रथमा

और द्वितीया

द्वितीय प्रश्नपत्र—शब्देन्दुशेखर ( अव्ययीभावान्त )

तृतीय प्रश्नपत्र—व्याकरणशास्त्र का

इतिहास	...	...	३० अंक
संस्कृत में अनुवाद	...	...	२० ,,
निबन्ध	...	...	५० ,,

### साहित्याचार्य परीक्षा

#### प्रथम खण्ड

सन् १९५२ के लिए

इसमें ३ प्रश्नपत्र होंगे

नियत पुस्तकें

प्रथम प्रश्नपत्र—काव्यप्रकाश



**द्वितीय प्रश्नपत्र-रघुवंश**

नैषध ३-१३, २२ सग

माघ ५-६ सग

**तृतीय प्रश्नपत्र-दशरूपक**

मृच्छकटिक

वेणीसंहार

प्राकृतप्रकाश

पालिपाठावली ( पृष्ठ १—४० )

**द्वितीय खण्ड**

सन् १९५२ के लिए

प्रथम प्रश्नपत्र-रसगंगाधर, उपमान्त

द्वितीय प्रश्नपत्र-अलंकारशास्त्र का इतिहास २० अंक

ध्वन्यालोक

... ८० ,,

तृतीय प्रश्नपत्र-निबन्ध

... ५० ,,

समस्या-पूर्ति

... २० ,,

कादम्बरी ( पूर्वाद्ध ) ... ३० ,,

**दर्शनाचार्य परीक्षा****प्रथम खण्ड**

सन् १९५२ के लिए

इसमें ३ प्रश्नपत्र होंगे

नियुक्त पुस्तकें

प्रथम प्रश्नपत्र-न्यायभाष्य

प्रशस्तपादभाष्य



द्वितीय प्रश्नपत्र-सांख्यतत्त्वकौमुदी

योगसूत्र व्यासभाष्य के सहित

तृतीय प्रश्नपत्र-शंकरभाष्य १ ; २ पहला और दूसरा

अध्याय वेदान्तपरिभाषा

द्वितीय खण्ड

सन् १९५२ के लिए

प्रथम प्रश्नपत्र-अद्वैतसिद्धि ( मिथ्यात्वनिरूपणम् )

चित्सुखो ( मिथ्यात्वनिरूपणम् )

द्वितीय प्रश्नपत्र-शाबर भाष्य ( तर्कपाद )

शास्त्रदीपिका ( तर्कपाद )

तृतीय प्रश्नपत्र-दर्शनों का इतिहास

... ३० अंक

संस्कृत में अनुवाद

... २० ,,

निबन्ध

... ५० ,,



SYLLABUS for those who take English in the  
Shastri or Acharya Examinations.

*Paper I.—Prose and Poetry:*

Explaining pieces from the prescribed texts into  
English and answering questions on them in English.

(a) For detailed study.

*Prose:*

1. To the Forbidden Land (Discoveries and Adventures in Tibet) by Dr. Suen Hedin.

(MacMillan and Co. Ltd.)

(Only 10 chapters)

Or

2. Cradle Tales of Hinduism by Sister Nivedita (Margaret E. Noble).

(Longmans Green and Co. Ltd.)

*Poetry:*

The following poems from Palgrave's Golden Treasury:—

1. Shakespeare: Under the Greenwood Tree.
2. Sir T. Wyatt: The Lover's Appeal.
3. Shakespeare: Blow, Blow Thou Winter Winds.
4. T. Campion: The Man of Life Upright.
5. R. Herrick: To Blossoms.
6. C. Cibber: The Blind Boy.



(b) For non-detailed study.

Either—Mackenzie: Some Makers of History.

(Blackie & Son (India) Ltd.)

(Only five lives).

Or—Mathur & Pearce-Fleming: Great Lives.

(Only five lives)

*Paper II.—Translation, Composition, Unseen and Grammar:*

(a) Rendering Hindi passage into English.

(b) An Essay on narrative or descriptive topic.

(c) Unseen passage—Prose or Poetry, Grammar and Idioms.

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### SCHEME OF EXAMINATION.

Two Papers, each- .... 50 marks.

*Time allowed for each Paper—3 hours.*

Minimum pass marks in the aggregate of 2 Papers—33%.

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### III.—Diplomas in French, German and Russian.

#### (I)—Diploma in French.

##### A.—ORDINANCES.

1. The Diploma course in French shall extend over two years and shall consist of six periods of teaching per week in each year.

2. There shall be one examination, conducted by the Dean, at the end of the first year, and a final examination conducted at the end of the second year which shall consist of written and oral tests.

3. Those who have passed the Certificate of Proficiency Examination of the University in French may be admitted to the second year Diploma class in that language and may be allowed to appear for the Diploma Examination at the end of that year.

##### B.—SCHEME OF EXAMINATION.

1. The Written Test shall consist of *two* Papers of *three* hours each as follows:—

##### *Paper I.*

- |  |              |
|--|--------------|
| (a) Translation of passages taken from prescribed texts in French. | } 100 marks. |
| (b) Translation of an unseen French passage.                       |              |
| (c) Translation into French  |              |
| (d) Grammar.   |              |



*Paper II.*

An essay on one of three topics of which two shall relate to the literature prescribed and the third shall be of a general nature. } 100 marks.

2. The Oral Test shall consist of :—

- (a) Dictation of an unseen passage .... 50 marks.
- (b) Reading of an unseen passage .... 50 marks.
- (c) Conversation in French .... 100 marks.

3. For passing, it is essential to secure 33% of the marks separately in the written and oral tests and 55% in the aggregate. Those who get 75% or more will be declared to have passed with distinction.

C.—COURSES OF STUDY.

*Books prescribed:*

*1st year.*

- 1. Robinet Bergeaud-Le Francais par la methode directe.
- 2. Selected texts (to be notified later).

*2nd year.*

Selections from French authors (to be notified later).

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## (II)—Diploma in German.

### A.—ORDINANCES.

1. The Diploma course In German shall extend  
Ordinances. over two years and shall consist of six periods  
of teaching per week in each year.

2. There shall be one examination, conducted by  
the Dean, at the end of the first year, and a final exa-  
mination conducted at the end of the second year which  
shall consist of written and oral tests.

3. Those who have passed the Certificate of Pro-  
ficiency Examination of the University in German may  
be admitted to the second year Diploma class in that  
language and may be allowed to appear for the Diploma  
Examination at the end of that year.

### B.—SCHEME OF EXAMINATION.

I. The Written Test shall consist of *two* Papers  
Ordinances. of *three* hours each, as follows:—

#### *Paper I.*

- |  |              |
|--|--------------|
| (a) Translation into English of<br>three passages taken from<br>the prescribed Texts in<br>German. | } 100 marks. |
| (b) Translation of two unseen<br>passages into English.  |              |
| (c) Grammar.   |              |



*Paper II.*

(a) An essay on one of three topics of which two shall relate to the literature prescribed and the third shall be of a general nature. } 100 marks.

(b) Translation into German of an English passage taken from the prescribed Text-Book. }

2. The Oral Test shall consist of:—

(a) Dictation of an unseen passage ....50 marks.

(b) Reading of an unseen passage ....50 marks.

(c) Conversation in German ....100 marks.

3. For passing, it is essential to secure 33% of the marks separately in the written and oral tests and 55% in the aggregate. Those who get 75% or more will be declared to have passed with distinction.

### C.—COURSES OF STUDY.

#### *Books prescribed:*

##### *1st year.*

1. College German—Blackmore Evans and R. O. Roseler.

(F. S. Croft & Co., New York).

2. Sags auf Deutsch—A first book for German Conversation by C. R. Goedsche.

(F. S. Crofts & Co., New York).

##### *2nd year.*

1. A Second German Reader by Edm. H. Zeydel.

(F. S. Crofts & Co., New York).

2. Another book to be notified later.



## (III)—Diploma in Russian.

*A.—ORDINANCES.*

1. The Diploma course in Russian shall extend over two years and shall consist of six periods of teaching per week in each year.

2. There shall be one examination, conducted by the Dean, at the end of the first year, and a final examination conducted at the end of the second year which shall consist of written and oral tests.

3. Those who have passed the Certificate of Proficiency Examination of the University in Russian may be admitted to the second year Diploma class in that language and may be allowed to appear for the Diploma Examination at the end of that year.

*B.—SCHEME OF EXAMINATION.*

1. The Written Test shall consist of two Papers of three hours each, as follows:—

*Paper I.*

- |   |              |
|---|--------------|
| (a) Translation of an unseen Russian passage. | } 100 marks. |
| (b) Translation into Russian.                 |              |
| (c) Grammar.                                  |              |

*Paper II.*

An essay on one of three topics of which two shall relate to the literature prescribed and the third shall be of a general nature.	} 100 marks.
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2. The Oral Test shall consist of:—

- (a) Dictation of an unseen passage .... 50 marks.
- (b) Reading and off-hand translation of an unseen passage .... 50 marks.
- (c) Conversation in Russian .... 100 marks.

3. For passing, it is essential to secure 33% of the marks separately in the written and oral tests and 55% in the aggregate. Those who get 75% or more will be declared to have passed with distinction.

### C.—COURSES OF STUDY.

*Books prescribed:—*

*1st year.*

As in Proficiency course.

*2nd year.*

1. Noah D. Gershevsky: Scientific Russian Reader  
(Pitman Publishing Corporation, New York, London)
  2. Other books to be notified later.
-



#### IV.—Diploma in Psychology.

##### PREAMBLE.

It is expected that the application of Psychology in the fields of Education and Industry will be more and more stressed. The study of industrial fatigue and similar problems have already been considered in the various schemes of amelioration of the conditions of labour. It is hoped that in the field of Education, Psychology will be applied to a much greater extent than at present.

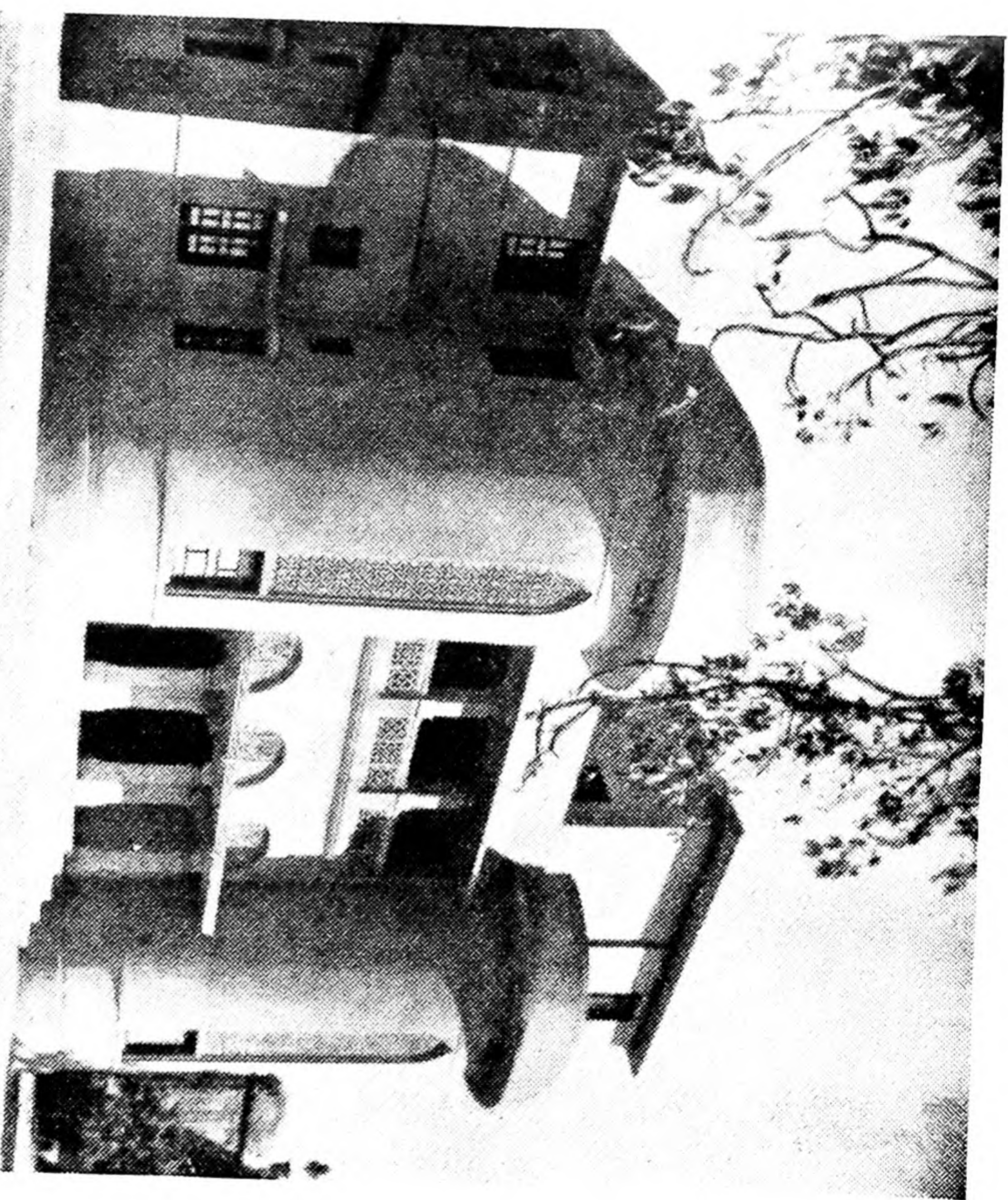
The recent proposals of the Government of the United Provinces to inaugurate a scheme of mental testing indicate this tendency. It is necessary for the success of these and similar schemes that a large number of persons should have a good grounding in Psychology as a theoretical science, as an experimental study and as one, the technique of which can be effectively employed in the field of observations, in education and in the spheres of social welfare work. It is desirable that a specialised course should be instituted at the University of Lucknow to prepare a number of people for psychological investigation as soon as the schemes under consideration are given effect to.

Psychology is also a subject in which all teachers are interested. A course of the nature suggested above would also be of value to the members of the teaching profession. Therefore a Diploma Course in Psychology has been instituted, as an experimental measure, along the lines indicated below.

##### DURATION OF THE COURSE.

The course shall spread over one full session comprising three terms. Out of these two terms shall be given to theoretical instruction and laboratory training. The





EXPERIMENTAL PSYCHOLOGY LABORATORY, LUCKNOW UNIVERSITY.







third term shall be devoted to field work. Each student will have to obtain from the Head of the Department a certificate to the effect that his field investigation has been satisfactory.

### QUALIFICATIONS FOR ENTRANTS.

The course is open to the following:—

- (i) Graduates;
- (ii) Holders of Diploma or Licence in Teaching;
- (iii) Those who have passed the Intermediate Examination and hold a Certificate in Teaching.

### EXAMINATION.

Examination shall consist of two Parts. Theoretical and Practical. There shall be three written papers and one Practical examination. A thesis, however, may, with the permission of the Head of the Department, be submitted on approved topics in lieu of one of the papers. A candidate in order to proceed to the Diploma Examination must produce certificates to the effect that he has attended the course of instruction regularly (that is to say, 75 per cent of the total number of periods of instruction). Each candidate shall also submit evidence of field work before he can be declared eligible for the examination.

- (i) Each candidate should supply a type-written report of the field work a fortnight before the examination to the proper authorities.
- (ii) A candidate who fails to submit a report of his field work shall not be allowed to proceed to the written and the Practical examinations.



- (iii) A candidate who defaults in the submission of his field work may appear at the practical and theoretical examinations of the next year without attendance at lectures, provided the evidence of field work is duly submitted before the examination.

### *SCHEME OF EXAMINATION.*

Pass marks for Written papers—36%

Pass marks for Practical—40%

Each paper will carry 100 marks.

Marks for Practical—100 marks.

*Time allowed for each Paper—3 hours.*

*First division* .... 60% of the total marks.

*Second division* .... 48% of the total marks.

*Pass* .... from the minimum Pass marks upwards.

### *OTHER DETAILS.*

(i) The teaching and supervision of practical and field work shall be in the charge of the Department of Philosophy.

(ii) A diploma on the basis of the examinations may be given to the candidates. The diploma will be called "Diploma in Psychology."

(iii) A fee of Rs. 72 for the session or Rs. 24 per term shall be paid by each candidate. The fee for the examination shall be Rs. 20.

(iv) The number of students may provisionally be limited to a class of not more than 20. The course will not be offered unless a sufficient number of students be forthcoming.

(v) The classes may be arranged to be held in the afternoons and in the mornings. The details of the hours will be arranged separately.



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### C.—COURSES OF STUDY.

#### *Paper I.—General Conceptions of Psychology.*

Psychology as a science: Its Methods, Varieties of Sensation: A general description of Sense organs. Images: Eidetic Images, Memory Images, Eidetic-type, Image type. Perception. Its general nature. Time and Space Perception. Genetic aspect of Perception. Memory, experimental methods and Laws, Ebbinghaus' experiments. Failure of Memory. Its causes. Imagination, Its general laws. Thinking. Intelligence; its various meanings Tests of Intelligence. Emotion, Attention and its relation to instinct and Emotion. Action: Reflex, Instinct, Ideomotor action. Will, Suggestion. Personality: its Types.

#### *Books recommended:*

Woodworth: Psychology.

Murphy: Introduction to Psychology (Briefer Course).

Isaacs: Intellectual Growth of Young Children.

#### *Paper II.—Profiles and Problems of Development.*

Conception of Growth. Profiles of Growth. Retardation: Its causes. The problem of the retarded child. Amentia: Its varieties. Deaf-Mutism. The problem of children. Problems of Adolescence. Special abilities and disabilities. Mental Hygiene, Heredity and Environment.

#### *Books recommended:*

Buhler: From Birth to Maturity.

Neill: The Problem Child.

Shuttleworth and Potts: Mentally Deficient Children.



Sen Gupta: Heredity in Mental Traits.

Sen Gupta: Mental Growth and Decay.

*Paper III.—Educational Psychology, Educational Tests and Measurements.*

*Educational Psychology.*

Psychological analysis of educability. Sensor functions. Motor functions, Attention. Plane of intelligence. The concept of interest, Play. Imitation. Lower limits of Educability: Psychological bases of methods of education; Pestalozzi, Froebel, Montessori, Training of the Ament, the deaf-mute and the blind. Psychological technique of Instruction. Methods of securing attention ensuring impressiveness of materials, diminishing resistance to instruction, increasing responsiveness. Suggestibility and critical attitude, Psychological analysis of curriculum: Suiting curriculum to different stages of growth: Older Theories. Subjects and their fitness for different age-groups, Vocational Guidance and Selection.

*Tests and Measurements:*

A general description and analysis of tests, Historical survey of tests. Types of tests. Outlines of statistical analysis of central tendencies Graphical representation of statistical data.

Simple problems in correlation.

*Books recommended:*

Hollingworth: Educational Psychology.

Fox: Educational Psychology.

Kelly: Educational Measurements.

Terman: The Measurement of Intelligence.



*Practical Work*:—Comprising (a) Field Work.

(b) The following experiments:—

1. Simple methods of determining the capacity of sensory discrimination: Aesthesiometry. Range of hearing. Campimetry, Colour Matching.
2. Image type: Draepin's method.
3. Memory: Learning method.
4. Attention: Method of distraction.
5. Emotion: Method of expression.
6. Emotion: X-O Tests.
7. Reaction-time: Chronoscopy.
8. Reaction-time: As applicable to field surveys.
9. Muscular Fatigue.
10. Maze-learning.
11. Mental Fatigue.
12. Intelligence tests.
13. True-False tests.
14. Analogies tests.
15. Multiple choice tests.
16. Introversion-extroversion tests.

*Books recommended*:

Titchener: Experimental Psychology (Students' Manual—Qualitative).

Whipple: Physical and Mental Tests, Parts I and II.



## V.—Diploma in Public Administration.

### PREAMBLE.

India is a vast country for the administration of the various Provinces and States for which a very large number of qualified men is needed, not merely for the Secretariats of the different Governments but also for the very large number of local and municipal bodies. Experience has shown that if the new entrants to public services get previous education and training in public administration, the tone of general administration is bound to rise leading to greater efficiency. Such qualified persons will be a great asset to the country particularly in view of the increasing measure of Self-Government. This Diploma is therefore, instituted to qualify young men for service under different Governments and local bodies.

### REGULATIONS.

1. The Diploma will be called "Diploma in Public Administration" (D.P.A.).

2. The Department of Political Science will be responsible for administration of the classes for the Diploma. There will be a Committee consisting of the Head of the Department of Political Science (as Convener), the Heads of Economics and Commerce Departments and six other persons elected by the Academic Council, of whom one to be a member of a Government Department and one to be from one of the outside Universities.

The course will extend over one full session for graduates and two full sessions for those who have passed the Intermediate Examination of the Board of High School and Intermediate Education or an examination recognised by the University as equivalent thereto.



4. Any graduate of this or any other approved University will be eligible for admission to the one year course. Preference for the one year course will be given to candidates who are already in service or those with post-graduate qualifications.

5. Any candidate who has passed the Intermediate Examination in Arts of the Board of High School and Intermediate Education, U. P., or an examination declared by the University as equivalent thereto, will be eligible for admission to the two-years' course.

6. A fee of Rs. 96 per session or Rs. 32 per term shall be paid by each student. There will be one examination at the end of the course for which the Examination fee will be Rs. 30. The classes will not be started unless at least 20 candidates offer the course. The teaching may be arranged either in the afternoons or evenings or mornings as may be found necessary and convenient.

7. For candidates for one year's course there will be one examination conducted by the University. For those with two years' course there will be, besides the final examination conducted by the University at the end of the second year, one examination at the end of the first year conducted by the Department. Only those candidates shall be eligible to take the University Examination for the Diploma, who have attend a regular course of study, putting in at least 75 per cent attendance of lectures.

8. Candidates who offer a thesis in lieu of one paper will have to get the subject of thesis approved by the Head of the Department at least six months before the examination. The thesis will be submitted at least a fortnight before the date fixed for the examination.



9. *Practical work*: In addition to the written examination, each candidate will be required to work in an institution (approved by the Committee) for at least 100 hours and to submit a certificate from the Head of that institution, along with his own report of the work done. Only on satisfactory completion of this, he will be entitled to the Diploma.

### *SCHEME OF EXAMINATION,*

Each Paper or Thesis will carry 100 marks.

*Time allowed for each Paper—three hours.*

Successful candidates will be placed in three divisions:

*First Division* .... 60 per cent or more of the aggregate.

*Second Division* .... 48 per cent of the total marks, but below 60 per cent.

*Third Division* .... At least 36 per cent of the aggregate, but below 48 per cent.

Under no circumstances shall a candidate who fails to secure 30 per cent marks in more than one Paper be certified to have passed the examination.

### *C.—COURSES OF STUDY.*

There will be *seven* Papers as follows:—

*Paper I—Principals of Public Administration.*

A.—Rise of modern public administration in the 19th Century.

B.—Principles of administration as derived from the working of the Civil Services of England, France and India.



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C.—The problem of personnel:—

- (i) Selection and training, gradation, promotion and superannuation.
- (ii) The place of the Scientific Civil Servant in the general scheme of the Civil Service.
- (iii) Relationship of the Civil Servant with the Public.
- (iv) The type of Civil Servant required to run the 20th Century Social Service State.

D.—The growth of public Corporations.

E.—Problems of organization.

*Books prescribed:*

W. F. Willoughby: Public Administration.

L. D. White: Public Administration.

Warner: Principles of Public Administration.

*Books recommended:*

Proctor: Principles of Public Personnel, Administration.

H. Finer: The British Civil Service.

W. Blunt: The Indian Civil Service.

L. S. O' Malley: Indian Civil Service.

Ptiffneer: Public Administration.

Sharp: French Civil Service.

White: Civil Service in the Modern State,

Clarke: Public Administration.



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*Paper II.—Principles of Local Government:*

A study of the Local and Municipal institutions of Great Britain, France, Germany, U.S.A. and India.

*Books recommended:*

Munro: Government of European Cities.

Munro: Government of American Cities.

Anderson: Local Government in Europe.

Munro: Municipal Government and Administration.

Finer: English Local Government.

Harris: Comparative Local Government.

Sir Arthur MacNalty: Local Government (England).

Page and Townshend-Rose: Local Government (Up-to-date 1939-1945).

Robson: Local Government in England.

*Paper III—Public Finance:*

*General:* The Nature of Public Finance and the main divisions of the subject. The Principle of Maximum Social Advantage.

*Public Expenditure:* The nature of Public Expenditure. Causes of its growth. Classification of Public Expenditure. The Distribution of Central, Provincial and Local Expenditure. The effects of Public Expenditure.

*Public Revenue:* Principal sources of Public Income. Characteristics of a good tax system. Canons of Taxation. Single vs. Multiple Tax System. Theories of Taxation. Progressive, Regressive and Proportional Taxation. Equity in Tax Distribution. Taxable Capacity. The Incidence of Taxation. The Effects of Taxation.



*Public Debts:* General characteristics. Form of Public Debts. Methods of raising Public Debt. Redemption of Public Debt. Difference between finance by loans and finance by taxes.

*Indian Public Finance:* Central, Provincial and local finance. Principal heads of revenue and expenditure of the Government of India. Provincial Governments and Local Bodies. The Indian tax system. The Indian Public Debt. The system of Indian Financial Administration. Budget; its preparation, voting and execution. Audit of accounts.

The standard will be B.A. Pass standard.

*Books recommended:*

Dalton: Public Finance.

Shirras: Public Finance.

Gyan Chand: Local Finance.

Wajid Ali Khan: Federal Finance.

*Paper IV.—Indian Public Administration:*

This course will include a study of the Provincial and Central Administrative departments. To provide a proper background, the general administrative system will also be studied

### *Provincial.*

The development, features and sphere of the Provincial administrative system, the District, the Division and Secretariat; the various primary and social service departments, specially—Police, Prisons, Revenue, Finance, Industries, Agriculture, Public Works, Public Health and Medical, Education. The study of the departments will include a critical study of their internal organization, their relation with other departments and control personnel, finances.



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*Central.*

The development of the Central Administrative departments, the subjects regulated by the Central administration; general features of the Central machinery; the Central Secretariat; the various departments, specially, the Home, the Finance, the External Affairs, the State Ministry, the Defence, Commerce and Industries.

The standard will be just an elementary one like B. A. Pass. Only general questions will be set.

*Books recommended:*

Annual Administration Report of the various departments of the Provincial Governments.

The Administrative Directory of the Government of India.

The Report of the Rowland Committee.

The Report of the Indian Statutory Commission.

S. C. Roy: Public Administration in Bengal.

*Paper V.—Administrative Law.*

This course will include a study of the organisation of administration, central control over localities, organisation of the Central Executive, and the military persons. Administrative Acts and Citizens' rights. Judicial control etc. Separation of Power. Rules of Administrative Law.

*Books prescribed:*

Ghose, N. N.: Comparative Administrative Law.

(Other books to be mentioned in the class).

*Book recommended:*

Hart: An Introduction to Administrative Law. (New York, 1940).



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*Paper VI.—Statistics,*

The standard will be B. A. Pass standard.

Introduction. Development. Statistical Data. Organization of a statistical enquiry. Classification and Tabulation Graphical and Diagrammatic Representation. Statistical Groups. Averages. Dispersion and Skewness. Correlation. Interpolation. Index Numbers. Probability. Sampling and Error.

*Books recommended:*

Ghosh and Chaudhri: *Statistics: Theory and Practice.*

King: *Elements of Statistical Method.*

*Paper VII.—Theory and Practice of Modern Governments.*

Forms of Government, Functions of Government, Theory of Representation. Separation of Powers, Bicameralism, Legislature, Executive, Judiciary, Local Governments, Democracy and Dictatorship, Communism and Fascism, Governments of England, U. S. A., Russia, Japan, India and Germany.

*Books prescribed:*

Ram and Sharma: *Modern Governments.*

Munro: *Government of Europe.*

Pardasani: *How India is Governed.*

Dr. A. C. Banerjee: *The Constitution of the Indian Republic.*

Strong: *Modern Constitutions (1949 Ed.)*

*Books recommended:*

Finer: *Theory and Practice of Modern Government.*

Bryce: *Modern Democracies.*



## VI.—Diploma in Foreign Affairs and Diplomacy.

### *A—REGULATIONS.*

I. The course will extend over one full session.

II. Only first and second class M.A's. in Modern History, Political Science, Economics and M.Com's. and LL.M's. will be admitted to the course.

III. Candidates shall be required to undergo a test of Proficiency in French or German or any modern Foreign language approved by the University. The tests will be conducted at present by the teacher in charge of French and German.

IV. The following will be compulsory papers.

(i) Theory and Practice of Diplomacy

(ii) International Law.

(iii) International Economics

and (iv) International Relations.

Provided that candidates who have already done any one or more of these papers shall be required to offer papers from the following in lieu thereof:—

1. International Organizations and Institutions.

2. Outlines of Modern World History.

3. Economics and Military Geography of the World.

4. International Trade, Tariffs and Commercial Agreements.

5. Diplomatic History of Asia.

6. Diplomatic History of U. S. A.

7. Problems of Population, Pressure and Migration in Asia.

8. History of Modern Russia.



V. There shall also be a *Viva-Voce* examination at the end of the course, carrying 100 marks as in each of the other four papers.

VI. A fee of Rs. 216 per annum will be charged for the Diploma Course.

### B.—SCHEME OF EXAMINATION.

Four Papers, each .... 100 marks.

*Viva-Voce* .... 100 marks.

Test of Proficiency in French or German or any modern Foreign Language: One Paper—100 marks—Minimum pass marks 36%.

*Time allowed for each Paper—3 hours.*

Successful candidates will be placed in three divisions:—

*First Division* .... 60 per cent or more of the aggregate.

*Second Division* .... 48 per cent of the total marks, but below 60 per cent.

*Third Division* .... At least 36 per cent of the aggregate but below 48 per cent.

Under no circumstances shall a candidate who fails to secure 30 per cent marks in more than one paper be certified to have passed the examination.

### C.—COURSES OF STUDY.

#### *Diplomacy.*

Definition, value of Diplomacy; Democratic Diplomacy; Changes in Diplomatic Methods after 1919, Important maxims. Foreign Policy: Authority who decides



and executes the Foreign Policy: Relation between Foreign Policy and Domestic Policy: Requirements of a Diplomat; a Diplomat in social life; his marriage, salary, uniform and decorations; Duties of a Diplomat; Gradation in the ranks of Diplomats; Agents Origin and Development of the Diplomatic Service, in General; Rules of old Vanies Diplomatic Service, Recruitment of the Foreign Service in ancient and middle ages; Training Schools in Diplomacy.

Formalities in appointing and taking charge as an Ambassador. Diplomatic Cards. Organization of the Department of Foreign Affairs.

Foreign Services of Imperial Government *e. g.* U. S. A., Great Britain, France, Austria, Vatican, Brazil.

Passports and Visas.

Consular Service.

Its origin and development.

Consulor's appointment, his duties and work.

Attachee.

Kinds and their field of work. Diplomatic Privileges and Immunities.

*Books recommended:*

(1) Satow: A Guide to Diplomatic Practice.

(2) Hill Ustay: Diplomacy.

(3) J. W. Foster: The Practice of Diplomacy.

(4) I. P. Heatley: Diplomacy and the Study of International Relations.

(5) H. Nicholson: Diplomacy.



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*International Law.**Peace.*

Definition, Source; Evidence; Basis; Relation between Municipal Law and International Law; Work of the first and second Hague Conference; Development of the Law of Nations.

Subjects of the Law of Nations; International persons; Position of the States within the family of Nations; Responsibility of States; Importance of the individuals to the law of Nations; Nationality; Modes of acquiring and losing nationality; Naturalization; Double Nationality and Statelessness; Reception of Aliens and right of Asylum; Position of Alien; Expulsion of Aliens; Extradition; Diplomatic Envoys.

The Institution of Legation; Right of Legation; Kinds of Legation; Appointment and reception of Diplomatic Envoys; Function of Diplomatic Envoys; Position of Diplomatic Envoys; Inviolability of Diplomatic Envoys; Extraterritoriality of Diplomatic Envoys as regards Third States; Retinue of Diplomatic Envoys; Termination of Diplomatic Envoys; Institution of Consuls; Consular Organization; Appointment of Consuls; Functions, Position and Privileges of Consuls; Termination of Consular Office.

*On War.*

Characteristics of War; Causes, Kinds and Ends of War; Laws of War; The region of War; The Belligerents; The armed forces of the Belligerents.

Commencement of War; Effects of the outbreak of War; Warfare on land in general; Treatment of wounded persons and dead bodies; Appropriation and utilisation of public enemy property; Appropriation and utilisation of private enemy property; Occupation of Enemy Territory; Warfare on sea in general; Air Warfare in general; Armistices.



### *Neutrality.*

Characteristics of Neutrality; Different kinds of **Neutrality**; Relation between Belligerents and Neutrals; **Violation of Neutrality**; Blockade; Contraband.

#### *Books prescribed:*

Oppenheim: International Law (2 Vols.).

Fenwick: International Law.

Briggs: Cases of Reading and International Law.

Pitt-Cabbot: Leading Cases of International Law (2 Vols.)

#### *Books recommended:*

Hall: International Law (9th edn.)

Lawrence: Principles of International Law.

A. P. Higgins: Hague Peace Conference.

### *International Economics.*

1. Development and nature of International trade. Trade depends upon transportation and communication, commodities come from many places. Trade is exchange of commodities and services. Foreign trade and domestic trade.

2. Raw materials in the International Economy. Interdependence in raw-materials. Political control over raw-materials. Restriction upon access to raw-material. Principal raw-materials and their services—metals, non-metallic minerals, coal and petroleum, vegetable food-stuffs; cotton, wool and silk; Forest products; other industrial metals.

3. Ocean shipping and trade routes. Development of modern shipping. Progress in ship design since 1900. Steamship conferences, Government subsidies to shipping; world shippingsince 1932, Trade routes.



4. The tariff question; Protection and free trade. Purposes of tariffs; Advantages of free flow of trade. A tariff on military essentials, protecting new industries. Tariffs may diversity production: Retaliatory tariffs, Emergency tariff, Incidence of tariffs; Types of tariff systems; Tariff; Terminology; Measuring tariff protection.

5. Protectionist Fallacies—The tariff question a political issue; Huge wages and cheap foreign labour; A competitive tariff to equalise costs of production; Preserving the home market for home producer; Keeping money at home, tariffs and demand for labour reducing tariffs, Tariffs imposed by creditor nation.

6. Commercial policies. Economic nationalism. Methods of Antarky-quotas; Exchange control; Clearing Agreement; Currency depreciation and devaluation; Import sur-taxes; sanitary regulations; Other restrictive measures; Commercial treaties; The most favoured nation principle; Reciprocity and tariff bargaining; British Commercial policy since 1914: Imperial Preference—France, Germany, Italy and Russia. The Netherlands, Belgium and Switzerland: The Scandinavian Countries, India and the Far East.

7. Exchange control—Exchange control prior to 1930. Exchange control during the Thirties. German Exchange control. Exchange control during the War.

8. Clearing Agreements, quotas and bilateral balancing.

9. International Economic co-operation. International Economic Conferences. League of Nations. Rehabilitation of Austria. Monetary Unions, Bank of International Settlements.



10. American Foreign Economic Policy; Government control over loans and investments. The Export Import Bank; Relation with Latin America: Good Neighbour policy; The Neutrality Act of 1937. United States in World Affairs, Atlantic Charter. The U. S. and reconstruction.

11. Course of International Finance 1918-42. Inflation after First World War. Gold standard, German reparations. The Dawes Committee. The Young Plan. The financial collapse of 1929-1933, Great Britain, U. S. A. abandons Gold Standard. The Second World War.

12. British Economy. The British Empire: British commercial supremacy: natural resources, merchandise imports and exports. Balance of payments, Commercial troubles: Commercial policy: Currency system. The Bank of England control of the Money Market by the Bank: Exchange Equalisation Fund.

*Books prescribed:*

Young: International Economy.

Culbertson: International Economic Policies.

*Books recommended:*

Horn: International Trade—Principles and Practice.

Donaldson: International Economic Relations.

J. H. Richardson: Economic Advancements.

R. K. Mukerjee: Crumbling of the Empire.

*Diplomatic History of U. S. A.*

1. Diplomacy and American Revolution.
2. N. Western Posts and the Jay Treaty of 1794.
3. The Mississippi question and the Pinckney Treaty of 1795.



4. U. S. and France 1798-1803.
5. The Diplomacy of War of 1812.
6. The Acquisition West of Florida.
7. The Monroe Doctrine.
8. The Annexation of Texas.
9. The War with Mexico.
10. The Anglo-American Relation of 1840-60.
11. The Diplomacy of the Civil War.

*The Latin America Policy of U. S. A.*

1. French intervention in Mexico and the Maximilian Empire. The Canal Policy of U.S.A. The Diplomacy of The Spanish-American War.

IV. The Good Neighbour Policy

*The Far Eastern Policy of U. S. A.*

1. The open door notes.
2. Diplomacy of Theodore Roosevelt in the Far East.
3. Taft and the Dollar Diplomacy.
4. Wilson and the Far East.
5. The Road to War—Diplomacy of Japanese—American Conflict.

*U. S. A. and Europe.*

1. American Diplomacy and World War I.
2. The origin and background of the World War II.

*Books prescribed:*

Baily: Diplomatic History of U.S.A.

Beard: The Rise of American Civilization.

Tansil: America goes to War.



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*Books recommended:*

Dennis: Adventures in American Diplomacy.

Packins-Dexta: Hands Off.

A History of Munro Doctrine.

Nippy I. F.; The U.S.A. and Mexico.

Stuart Q. H.: Latin American: U.S.A.

Adam, E. D.: G. Br.—the Civil War.

*International Relations.*

*General and European—*

The growth of the great powers; The alignment of powers before 1914; The peace settlement of 1919-23; The League of Nations; The Foreign Policies of Great Britain, France, Germany, Italy and of the Soviet Union between the two World Wars; The re-alignment of powers before 1939; The course of the 1935-45 War.

The problem of minorities in Europe; Disarmament; Palestine; Egypt and Sudan; Mandates and Trusteeship system; the Arab League. American—The Monroe Doctrine and its various extentions; U.S.A's. relations with Canada, Central America and South America; Pan-American Union; U.S.A's. Relations with China, Japan and Philipines; The Diplomatic History of the Panama Canal.

Far Eastern—The opening up of the Far East; The Washington Conference of 1921-22; Japanese-Chinese Relations since 1914; The policies of Soviet Union, G.B., U.S.A. and France towards China and towards Japan; Recent development S. E. Asia.

*Books prescribed:*

Carr: International Relation Since Peace Treaties.  
(Latest Edition.)

Bailey: Diplomatic History of U.S.A.



Schumann: International Politics (Latest ed.)

Norman Hill: Claims to Territory in International Law and Relations.

*Books recommended:*

Mowat: European State System.

Gathorne Hardy; A Short History of International Affairs.

Buell: International Relations.

Latane: American Foreign Policy.

*Geopolitics.*

I. Geopolitics in Principle.  
Definition and Scope of Geopolitics.

II. Evolution of Geopolitics.

III. Main Factors of Geopolitics—location; Shape and size; Climate; Population; natural resources; Industrial capacity; political and social organization.

IV. Geopolitics and its employment by the Nazis.

V. Geopolitical strength of India.

VI. Geopolitical strength of U.S.A.

VII. Soviet Union: Dynamics of the Urasian Heartland.

VIII. The British Commonwealth.

IX. Other States—China, France and Italy.

X. Contribution of Geopolitics.

*Books prescribed:*

Fifield Percy: Geopotitics in Principle and Practice.

Robert Strausz Hupe: Geopolitics.

Makinder: Democratic Ideals and Reality.



*Books recommended:*

Clausewitz: On War.

Herald and Margaret Sprout: Foundations of National Power.

Philips: Roots of Strategy.

Earle: Makers of Modern Strategy.

Hupe: The Balance of To-morrow.

*International Organization.*

Factors in a plan for International Organisation (1) Type (2) Membership (3) Organs of Government (4) Transfer of Jurisdiction (5) Methods of Enforcement (6) Immediate Steps (7) Territorial Changes (8) Ratification.

International Labour Office; Short History of International Organisations; League of Nations and its auxiliary bodies, especially the permanent mandate's commissions, the Court of International Arbitration, the permanent Court of International Justice.

United Nations organization, General Assembly; The Security Council; Pacific Settlement of Disputes; The Economic and Social Council; International Court of Justice; The Secretariat; International Labour Organization. United Nation's educational scientific and cultural organization: Food and agricultural organization.

*Books prescribed:*

P. B. Potter: An introduction to the study of International Organization. 5th Edition 1948.

C. K. Webster: League of Nations in Theory and Practice.

*Books recommended:*

Bernes: The History of International Labour Organization.

United Nation's Documents in 2 Vols.

Mower: International Government.



## VII.—Diplomas in Archaeology.

### A.—ORDINANCES.

1. The Diploma shall be called the “Diploma in Archæology.”

2. The course for the Diploma will extend over a period of twelve months and shall comprise of the following *four* Papers:—

(I) Pre-historic Archæology.

(III) Environmental Archæology.

(III) Elements of Anthropology.

(IV) Field Archæology, including photography, survey and mending of objects, pottery etc.

Papers I to III will be Theory papers and Paper IV will include both Practical examination and Theory.

3. The course will be opened to M.A's. in (i) Indian History in different groups, (ii) Group B of Economics and Sociology, (iii) Sanskrit Culture and Civilization and (iv) Sanskrit, provided the candidates had taken History as one of their subjects for the B.A. degree.

4. The fee for the Diploma course will be Rs. 216 per session and an additional fee of Rs. 75 per session shall be charged towards the expenses of tours.

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### B.—SCHEME OF EXAMINATION.

5. The following shall be the Scheme of Examination:—

Paper I:—Pre-historic Archæology	100 marks.
Paper II:—Environmental Archæology	100 „
Paper III:—Elements of Anthropology	100 „
Paper IV:—Field Archæology, including photography, survey and mending of objects, pottery, etc.	
Theory	.... 50 marks.
Practical Test	.... 50 „

*Time allowed for each Paper—3 hours.*

Minimum pass marks in the Written papers .... 36%

Minimum pass marks in the Practical examination  
36%

Candidates are required to pass in the Theory and Practical examinations separately in Paper IV above.

Successful candidates will be placed in three divisions:—

*First division: 60% or more of the aggregate.*

*Second division: 48% of the total marks but below  
60%*

*Third division: At least 36% of the aggregate but  
below 48%*



### C.—COURSES OF STUDY.

There will be *four* Papers and a Practical examination as follows:—

Papers I, II and III will be Theory Papers.

Paper IV will include both Practical examination and Theory.

*Paper I.—Pre-historic Archæology.*

*Books recommended:*

DeMorgan	....	Pre historic Man—General. Outline of Pre-history.
Quennell	....	Life in Pre-historic Times.
Osborn	....	Men of the Old Stone Age.
Childe	....	Man Makes Himself.
Childe	....	Progress and Archæology.
Leakey	....	Adam's Ancestors.
Fleure	....	Pre-historic Hunters.
Keith	....	Antiquity of Man.
Sankelia	....	Pre-historic Archæology of Gujrat.

*Paper II.—Environment Archæology:*

*Books recommended:*

Zeuner—Dating the Past.

*Paper III.—Elements of Anthropology:*

*Books recommended:*

Howton: Up from the Ape.

Howells: Mankind So Far.

Haddon: The Wanderings of Man.



Griffith Taylor: Environment and Race.

Ashley Montague: Man's most dangerous Myth—  
The Fallacy of Race.

*Paper IV.—Field Archæology, including photography,  
survey and mending of pottery, etc.*

*Books recommended:*

*(a) Field Survey:*

Usill, G. W.: Practical Surveying.

Veale, G. J.: Surveying, Part I (Thomason Engineering College Manual, No. XIV).

*(b) Field Photography:*

Cookson, M.B.: Archæological Photography (Ancient India No. II).

Beazeley, G. A.: Air Photography in Archæology (The Geographical Journal, LIII 1919).  
Air Surveyor in Development (Govt. of India Publication 1947).

*(c) The Principles and Technique of Field Archæology:*

Boulton, W. H.: Romance of Archæology.

Petrie, W. M. E.: Methods and Aims in Archæology.

Woolley, Sir Leonard: Digging up the Past.

Wheeler, R. E. M.: Horizontal and Vertical Excavations. (Ancient India, Vol. III).

Wheeler, R. E. M.: Further Notes on Digging and Recording. (Ancient India, No. IV).

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VIII.—Diploma in Social Services of J. K. Institute of Sociology and Human Relations.

A.—REGULATIONS.

1. The Diploma will be called "Diploma in Social Services of the J. K. Institute of Sociology and Human Relations, Lucknow University."

2. The course will extend over one full session.

3. Only M. As. and M. Coms., will be admitted to the course, preference being given to M. As. in Economics and Sociology.

4. The course will include one compulsory paper, one special paper, a social survey and practical work as follows:—

*Paper I.—Sociology and Social Administration.*

*Paper II.—Any one of the following:—*

(a) Labour Welfare and Personnel Management.

(b) Criminology.

(c) Rural Welfare and Co-operation.

(d) Marketing and Food Administration.

*Paper III.—Field Social Survey of an approved topic.*

*Paper V.—Practical Work of a term.*

Or

*Case Work extending to 30 Cases.*

Students taking Paper II (d) will have to undergo a practical course in a laboratory for refraction, grading and standardisation for Paper IV besides a marketing survey in lieu of Paper No. III.

5. A fee of Rs. 180 per session will be charged for the Diploma Course.



### B.—SCHEME OF EXAMINATION.

Each Paper or Survey	....	.... 100 marks
Practical Work	....	.... 100 marks
(out of which 60 will be on Written work and 40 on <i>Viva Voce</i> examination).		

*Time allowed for each Paper—3 hours.*

First division, 60 per cent and above	} of the aggregate marks.
Second division, below 60 per cent and not less than 48 per cent	
Third division, below 48 per cent but not less than 36 per cent	

Under no circumstances shall a candidate who in the examination fails to secure 30 per cent marks in more than one paper be certified to have passed the examination.

### C.—COURSES OF STUDY.

The course will include one compulsory paper, one special paper, a social survey and practical work as follows:—

Paper I.—Sociology and Social Administration, including a study of the ecology and psychodynamics of human relations. The structure and functioning of groups and institutions with special reference to India. Caste and class attitudes. Social values. Social pathology and social disorganisation. Development of personality and personality problems. Culture, personality and morals. Social control. Semitonic and society. Methods and techniques of social survey and case work.



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*Books recommended :*

Mead: Mind, Self and Society.

Young: Social Psychology.

Landis: Social Control.

Brown: Psycho-dynamics of abnormal behaviour.

Murphy: Personality.

Elliot & Merili: Social Disorganisation.

Young: Interview in Social Case Work.

Clark: Social Administration.

D. Cardog Jones: Social Surveys.

Paper II.—Any one of the following:—

- (a) *Labour Welfare and Personnel Management*: including industrial relations, labour legislation, industrial psychology, social security, regulation of employment, housing and welfare.

*Books recommended :*

Elton Mayo: The Social Problems of an  
Industrials Civilisation.

Industrial Relations and Approaches to  
Social Security—I. L. O. publications.

Rege Report on Labour.

U. P. Labour Enquiry Report.

Mellis and Montgomery: Economics of  
Labour.

Mc Connor: Personnel Management.

Tiffin: Industrial Psychology.

Robson: Social Security.

Adarkar: Report on Health Insurance,  
Indian Labour Year-book.



(b) *Criminology*: including treatment of juvenile, adolescent and adult delinquency, child protection, probation and parole, rehabilitation and aftercare.

*Books recommended:*

Reckless: Criminal Behaviour.

Healey and Bronner: New Lights on Delinquency.

Aichhorn: Wayward Youth.

Mowrer: Disorganisation, Personal and Social.

(c) *Rural Welfare and Co-operation*: including village communities, co-operative law and organisation. Village Panchayat and rural reconstruction. Estate Management.

*Books recommended:*

Report of the Co-operation Planning Committee.

Manual of Co-operative Societies, U. P.

Reviews of the Co-operative Movement in India by the Reserve Bank.

The Village Panchayat Act.

Radha Kamal Mukerjee: Planning the Countryside.

Baljit Singh: Whither Agriculture in India?

Radha Kamal Mukerjee: Democracies in the East—(selected chapters).

Report of the U. P. Zamindari Abolition Committee.



(d) *Marketing and Food Administration*: including primary and secondary markets—their organisation and working; marketing finance, co-operative marketing; marketing intelligence and statistics, marketing services, standardisation and grades; marketing legislation; procurement and monopoly purchase; distribution and rationing; nutrition, dietetic requirements and standards; cloth standards control and prices; emergency and famine relief and services.

*Books recommended.*

Selected Reports of the Agricultural Marketing Department, Government of India.

Food, Famine and Relief: League of Nations.

Food Grains Policy Committees' Reports of 1943-47.

Report of the Commodity Prices Board.

Report of the Famine Enquiry Commission.

Agricultural Prices Sub-Committee Report.

Mukerjee: Food Planning for 400 millions.

Baljit Singh: Population and Food Planning.

*Paper III.—Field Social Survey of an approved topic.*

*Paper IV.—Practical work for a term in some approved public or voluntary organisation, including attendance at Conferences.*

Or

*Case work extending to 30 Cases.*

There will be an oral examination in addition to the written reports of social survey and practical work.



For practical work the following will be approved:—

1. Labour Welfare Centres.
2. Employment Exchanges.
3. Co-operatives.
4. Hospitals and Nursing Centres.
5. Poor Houses, Orphanages and Institutions for the protection of children and women.
6. Jails and Reformatories.
7. Criminal Tribes Settlements.
8. Any institutions approved by the Director.

Students taking Paper II (d) will have to undergo a practical course in a laboratory for refraction, grading and standardisation for Paper IV, besides a marking survey in lieu of Paper No. III.

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## IX--Diploma in Medical Radiology and Electricity.

### A.—REGULATIONS.

The Course for the Diploma is open to graduates of Medicine of this and other approved Universities.

Students are required to attend a course of study approved by the University, and extending over not less than one year (November to October).

The course of study must, unless special exemption is obtained, be continuously pursued. 80 per cent attendance in lectures, demonstrations and practical classes will be required before a candidate can be signed up.

The subject of the course are as follows:—

Part I.—Electro-Magnetism. Electro-Technology as applied to Radio-diagnosis and Radio-therapeutics.

Part II.—(a) Radiography and Radio-diagnosis.  
(b) Radio-theraphy.

There will be *two* papers of 40 marks each on the subjects mentioned in (a) and (b) above.

The course will consist of lectures and demonstrations as well as practical instructions in all three subjects as follows:—

Part I.—Electro-Magnetism and Electro-technology—approximately 30 lectures and demonstrations and 60 hours practical instruction.

Part II.—Radiography, Radio-diagnosis and Radio-therapy—a course extending over three terms.

An outline syllabus indicating the general scope of the Diploma is set out below.



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### *B.—EXAMINATIONS.*

Regulations      The examination for the Diploma consists of two Parts. Candidates may enter examination, or may enter for Part I only.

A candidate will not be permitted to proceed to Part II of the examination unless he passes Part I of the examination.

Exemption will not be granted from any Part of the examination. The examination will consist of a paper, a practical examination and an oral examination in each of the subjects under Part I and Part II.

MARKS:—Paper, 40, Practical 60, Pass 50 per cent separately in Written and Practical work.

*Duration of the Paper—3 hours.*

Part I of the examination will be held twice in each year ordinarily about the middle of April and in October.

Part II of the examination will be held once a year ordinarily in October.

(Students entering either one or both Parts of the examination must apply to the Registrar for an entry form which must be returned duly filled in and attested in accordance with the Regulations as to approved courses of study, together with the proper fee, not later than 1st January for the April examination and 1st September for the October examination).



Examination fee Rs. 100 for each Part.

The course will extend over a period of three terms and the fee will be Rs. 400 per session for students outside U. P. and Rs. 300 per session for U P. student payable in three instalments.

No course will be started unless at least two students signify their intention to attend, and not more than four students will be accepted for any one course.

Candidates who enter for both Part I and Part II on the same occasion but owing to failure in Part I are not admitted to Part II will be entitled to a refund of the fee paid for Part II.

### *C.—COURSES OF STUDY.*

#### *PART I.*

Electro-Magnetism and Electro-technology.

Elementary electricity and magnetism.

Electro-statics—Fundamental ideas of Charge Potential and Capacity. Electro-statics, Induction, Condensers. Electroscopes, and Electro-meters.

Current Electricity—The production, proportions and measurement of continuous interrupted and alternating electric currents. Magnetic, Chemical and Thermal properties of currents, Ohm's Law, Construction and Action of Galvanometers, Ammeters, Voltmeters, Milliampere-second meters and Oscillographs. The conduction of electricity through solids, liquids and gases.



Electro-Magnetic Induction—Production of induced currents. Theory of the Transformer and the Induction coil.

Electro-technics—Construction and action of Dynamos, Motors, Rotary converters, High tension Transformers, Relays, Rectifiers. Protection against Electrical Dangers and Accidents.

Magnetic Radiation:—

1. Infra-Red and Ultra-Violet radiations.
  - (a) Physical properties.
  - (b) Technical applications.
2. X-Rays.
  - (a) X-Rays in general.
  - (b) X-Ray apparatus.
  - (c) Production of X-Rays.
  - (d) Measurement of X-Rays.
  - (e) Distributions of X-Ray in tissues.
  - (f) Dosage.

Cathode ray, Types of X-Ray tubes, Absorption of X-Rays by solids and fluids, and variations of this with wavelength, atomic number, etc.

Characteristic X-Rays. Scattering of X-Rays.

X-Ray localisation and Stereos copy



Physical aspect of Irradiation.—Intensity and quality at surface and in depth. Effect of the following factors, Area and distribution of focifitration, distances, and area of field. Protection against X-Ray and the rays from Radio-active Substances.

Photography.—Theory of photographic Action and Image formation. Developing, Printing, Enlarging and Reducing.

Practical Work—Use of Dosimeters and Tintometers, Determinations of half value layer. Testing X-Rays apparatus. Detection of faults in apparatus.

## PART II.

### A.—Radiography and Radiodiagnosis.

Radiographic technique.

Photographic technique.

The X-Ray examination of the various anatomical systems in normal and pathological conditions.

### B.—Radio-therapy.

1. Superfical, Medium and deep X-radiation.

2. Low voltage contact. therapy—Chou-therapy.

3. Grenz rays.

Local and general conditions amenable to radiation therapy, dosage and fields.

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## X—Diploma in Laryngology and Otology

### A—ORDINANCES.

1. The Diploma shall be called “Diploma in Laryngology and Otology” (D. L. O., Lucknow) and shall be conferred after the requisite examinations have been passed.

2. Candidates will be permitted to appear for Part I of the examination at any time after passing the M.B.B.S. examination of this University or equivalent examination of any University recognised by the General Medical Council of India.

3. The examination shall consist of two Parts:

*Part I.*—A Written and Oral examination on the Anatomy, Embryology and Physiology of the Structures in the Head, Neck and Thorax. There shall be only one Paper to be set by the external examiner.

*Part II.*—A Written, Oral. Practical and Clinical examination on:—

- (a) Special instruments and appliances.
- (b) The Medicine, Surgery, Pathology and Bacteriology of the Nose, Throat, Ear and neighbouring organs.

There shall be *two* papers: one to be set by the internal examiner and the other by the external examiner.

4. The examination shall be conducted by one internal examiner who shall be the Senior Lecturer in E. N. T. Diseases and one external examiner who shall be as E. N. T. Specialist.



5. No candidate will be permitted to appear at the Part II of the examination unless he has previously passed the Part I. A candidate, however, can take the two Part at the same examination, if he has, otherwise, fulfilled the conditions as regards the course of study.

6. Exemption will not be granted from any Part of the examination.

7. Marks—Paper 40—Time 3 hours; Practical 60—Time 3 hours ( $1\frac{1}{2}$  hours clinical— $1\frac{1}{2}$  hours practical and oral)—Pass marks 50 per cent in Written and Practical examination separately.

8. The examination shall be held twice a year, ordinarily about the middle of April and in October.

9. Candidates entering for either Part or both the Parts of the examination must apply to the Registrar for an entry form which must be returned duly filled in and attested in accordance with the Regulations as to the approved courses of study together with the proper fee, not later than 1st January and 1st September for the April and October examinations respectively.

10. Examination fee—Rs. 100 for each Part.

### *B—REGULATIONS.*

1. For the present all teaching hospitals are recognised hospitals, and also the Irwin Hospital, New Delhi.

2. The course of study shall extend over one year (November to October).

3. Eighty per cent of the attendance will be required before candidates are signed up for the examination.



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## C—COURSES OF STUDY.

### PART I.

*Physiology:* Mechanism of perception of smell, and flavour, Mechanism of breathing. Voice production. Mechanism of deglutition. Functional tests of the nose and para-nasal sinuses. Mechanism of cough and sneezing.

*Sound:* Theories of hearing. Mechanism of perception of sound and speech. Physiology of equilibrium. Cerebral distribution of sound. Physiology of brain in connection with hearing, smell and voice production.

Physiology of Larynx.

Histology of mucous membranes, internal ear and other associated organs and structures.

*Anatomy:* Development of ear, nose and throat including palate and the larynx. Development of Oesophagus, trachea and lungs.

Detailed and applied anatomy of the skull bones, accessory sinuses, external and internal ear, nose, nasopharynx, pharynx, larynx, trachea, and bronchii, lungs, pleurae, Oesophagus and the mediastinum.

Anatomy of all cranial nerves.

### PART II.

Examination of the nose and the accessory sinuses, diagnosis of the medical and surgical treatment of various diseases, of nose throat and the ear. Preventive treatment, infectious diseases, and diseases of children in this region. Circulatory, and nervous disturbances of the nose. Their effects on other organs of the body. Deformities, injuries, polypi and the tumours of the nose. Organisms connected with the nose and the pathological



processes they produce. Immunity in connection with nose.

Diseases due to worms and insects: Electro-medical and electro-surgical treatment of nose diseases: Functional disturbances: anæsthetics in connection with nose.

Examination of the ears. Deafness and allied diseases. Complications of diseases of the ear. Injuries, tumours, nervous and circulatory disturbances of the ear. Tinnitus. Training of the deaf and mute.

Insanity and the ear. Surgical pathology of various diseases processes and their causative organisms. A course of instruction on the surgical anatomy, physiology and operative surgery of the ear and complications of the diseases of ear. Anæsthetics. Auditory aids.

*Throat and Larynx:* Examination of diseases of children in connection with throat and larynx. Nervous and Vascular disturbances.

Pathology of various diseases of the larynx and throat and their causative organisms. Infectious diseases of:—

Bronchoscopy.

Oesophaguscopy.

Direct Endoscopy.

Electro-medical and Electro-surgical treatment of various diseases of Ear, Nose and Throat.

Examination and reading of skiagrams in connection with these diseases.

Pathological specimens and slides.

Special apparatus for the diagnosis and treatment of the diseases of Ear, Nose and Throat.



## X1.—\*Diploma in Gynæcology and Obstetrics.

### A.—ORDINANCES.

1. †Candidates for this Diploma (D. G. O., Lucknow) must be medical graduates of a recognised University.

2. The examination will be held twice yearly and candidates will be required to give six months' notice of their intention to enter for it, *viz.*, on 1st April or 1st October. Before being allowed to sit for the examination each candidate must present evidence—

(a) of having held for not less than one year a House appointment in a special hospital for Maternity, Gynæcology and Diseases of the New Born;

(b) of having personally performed six gynæcological and six maternity operations. They will submit the histories of these cases.

3. The examination will be in two Parts. Only those candidates who have passed Part I of the examination will be allowed to proceed to Part II.

### PART I.

One Paper consisting of two Parts: Part I to be set by the Professor of Anatomy on the Female Pelvis, its contents and Embryology and Part II to be set by the Professor of Physiology on the physiology of the generative organs including Endocrinology.

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†The question of institution of this Diploma is still under consideration.

\*Minimum number of candidates for admission to this course at present is four.



(a) One Paper in Midwifery and Disease, of the New Born.

(b) One Paper in Gynæcology and Gynæcological Pathology and Gynæcological Operations;

(c) A Practical, Clinical and Oral examination.

4. The Examination fee will be Rs. 100 for Part I and Rs. 200 for Part II.

5. Fees for the Course will be Rs. 400 per session from students outside U. P. and Rs. 300 per session for U. P. student (payable in three instalments).

#### SCHEME OF EXAMINATION.

Ordinance.	Each Paper	....	.... 100 marks
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*Time allowed for each Paper—3 hours.*

Pass marks 50% in Written and Practical examinations separately.

Paracticals 150 marks—	}	$\frac{1}{2}$ hour Clinical Mid-
Time— $1\frac{1}{2}$ hours		wifery.
		$\frac{1}{2}$ hour Clinical Gynæ-
	}	cology.
		$\frac{1}{2}$ hour Path. Oral and
		Instruments.



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### *B—REGULATIONS.*

1. The course for the Diploma is open to Medical graduates of this and other approved Universities.
2. Students are required to attend a course of study covering one year (November to October).
3. Eighty per cent of attendance at lectures, demonstrations and practical classes will be required before candidates are signed up.
4. The course of studies includes Anatomy and Physiology of the Pelvis in both pregnant and non-Pregnant conditions, diseases and anomalies in pregnancy labour and the puerperium as also diseases of the neo-natal period, ante-natal and post-natal care as well as the diseases peculiar to women.
5. The examiners shall be those appointed for the M.B.B.S. examination in these subjects and they will set and assess the papers of Part II in collaboration. They will similarly assess the practical, clinical, and oral part of the examination.
6. The examinations will be held twice yearly, ordinarily about the middle of April and in October.
7. The minimum number of candidates to enter for a course will be four.

### *C.—COURSES OF STUDY.*

The course comprises:—

*Part I.*—A course of 8 lectures, demonstrations in the Anatomy of the female pelvis including bones, joint soft parts, and all the contained organs as well as embryology thereof.



*Part II.*—A course of 8 lectures in the physiology of the female generative organs including Endocrinology.

1. A course of 32 lectures in Obstetrics and Gynæcology including normal and abnormal conditions in pregnancy, labour, puerperium and diseases of the female generative system.

2. A course of 8 demonstrations is Morbid Histology and Bacteriology connected with Gynæcology and Obstetrics.

3. A course of six months clinical instruction and attendance at operations together with regular teaching on the subjects of the course.

4. The examination will consist of two Parts. Candidates may enter for both concurrently but must pass in Part I before appearing for Part II.

*Part I.*—One paper consisting of the following Parts:—

(1) On the female pelvis, its contents and Embryology.

(2) On the Physiology of generative organs including Endocrinology.

*Part II.*—Consisting of the following papers:—

(1) Paper in Midwifery and Diseases of the New Born.

(2) Paper in Gynæcology, Gynæcological Pathology, and Gynæcological operations.

A Practical examination, including clinical cases, Pathological specimens, instruments, dummy, etc., lasting 4 hours.



## XII—Diploma in Clinical Pathology.

### *A.—ORDINANCES.*

1. The Diploma shall be called “Diploma in Clinical Pathology” (D. C. P., Lucknow).
2. The admission of the candidates will be made in the month of September on receipt of applications in August and the course of instruction will begin from 1st day of November. The course will last for a full complete year (November-October).
3. Not more than 4 candidates will be admitted at a time.
4. The examination will be held twice a year, ordinarily about the month of April and in October, along with that of M.B.B.S., and will consist of two Parts:—

*A.—Written*—There will be two Papers of hours each with 150 marks assigned each of them.

First Paper on the Theory and Practice of Morbid Histology, Hæmatology including Parasitology.

Second Paper on the Theory and Practice of Chemical Pathology and Clinical Bacteriology including Immunology.

Each Paper will consists of 6 questions divided into two parts. The two parts in the First Paper will be sent and examined by the external examiner for M.B.B.S., and the Head of the Department of Pathology while the two parts in the Second Paper will be set and examined by the Reader and Leeturer of Pathology.



B.—Practical and Oral examination will be conducted by all the four examiners (one external and three internal) in collaboration—300 marks will be assigned for practical and oral.

5. A candidate will be declared successful if he obtains 50% marks in both the Parts A and B separately.

### *B.—REGULATIONS.*

1. Students are required to attend a course of study and practical instructions for a period of one full year (November to October).

2. Eighty per cent attendance in the laboratory and also at lectures is essential.

3. The course of study will include Bacteriology, Morbid Histology, Hæmatology and Chemical Pathology.

4. The external examiner shall be the same as appointed for M.B.B.S. examination. All the examiners will assess the two Parts of the examination in collaboration.

5. Candidates who have already been Lecturers Grade B or Demonstrators in any Department of Pathology of a recognized University for not less than one year, will be exempted from this training for a period of six months but must get themselves enrolled in the beginning of the course of instruction *i.e.* in November.

6. Fee for the course will be Rs. 150 for the whole year. No concession will be shown to candidates mentioned in para 5 in the matter of fee.

7. Fee for examination will be Rs. 150 per candidate.



8. Failures in April can re-appear in October examination after paying a further fee of Rs. 150.

9. The remuneration for the examiners will be as follows:—

For setting each question-paper .... Rs. 75

For examination each Answer-book .... Rs. 3

For Practical and Oral (including Rs. 50  
for the external examiner) Rs. 125

### *C—COURSES OF STUDY.*

The Course will consist of:—

1. Instructions, both Theoretical and Practical, in the practice of Advanced methods in Bacteriology, Morbid Histology, Hamætology and Chemical Pathology.

2. Instructions at the Post-Mortem examination, where attendance of the candidates will be compulsory.

3. A study in the relative value of the different fluids used in the mounting of specimens in the museum of Pathology, including the technique of dressing and mounting the specimens.

4. A practice on the microphotography and also in the use of other projection apparatuses.

5. A study of the common parasites pathogenic to man, including snakes.

6. A course of practical instruction in the preparation of different types of media for the growth of bacteria.

7. A course of 16 lectures to be given on the different subjects involved by the members of the staff of the department of Pathology, during the course of the year.



### XIII.—Diploma in Tuberculosis Diseases.

#### A.—ORDINANCES AND REGULATIONS.

1. The Diploma shall be called "Diploma in Tuberculosis Diseases" (D. T. D.) of the Lucknow University.

2. The number of candidates at present will be restricted to six.

3. The examination will be held in two Parts. Part I examination will be held about the middle of April and the Part II in October. Supplementary examination of Part I will be held a fortnight before the examination of Part II.

4. Fees will be Rs. 300 for the complete course for the students of this University and the rest will pay Rs. 400.

5. Examination fee for Part I will be Rs. 100 and for Part II will be Rs. 100.

1. The course will consist of a study of the subject Regulations. of Tuberculosis for a period of one year (November to October).

2. The instruction will cover the academic and the applied aspects of the subject.

3. It will be divided into two Sections:—

Section No. 1: It will consist of the theoretical and applied aspects of Bacteriology, Pathology, Immunology and Practical laboratory methods in Tuberculosis. An examination with two Papers, Practical and Oral will be set after 3 months of study.



**Section No. 2:** It will consist of Theory and Clinical Practice in Tuberculosis including applied Anatomy, Physiology and Radiology. This study will include lectures, demonstrations, post-mortems and applied procedures (Operations and Diagnostic investigations) demonstrated and also done by the students.

This will also cover the subject of Prophylaxis or Anti-Tuberculosis measures in Tuberculosis. Students will be required to obtain first hand knowledge of working of various Anti-Tuberculosis Organisations including sanatoria. A short stay for some time at the Bhowali Sanatorium or the proposed Bara Banki Sanatorium or some other sanatoria outside the Province, will be required depending on circumstances. At the end of the course an examination consisting of two Papers and Practical and Oral will be held.

### *B.—SCHEME OF EXAMINATION.*

Ordinance. *Part I Examination* will carry 200 marks as follows:—

		Marks.
First Paper	....	50
Second Paper	....	50
	<b>Total</b>	100
Oral	....	25
Practical	....	75
	<b>Total</b>	130
	<b>Grand Total</b>	200



*Part II Examination* will carry 300 marks as follows:—

	Marks
First Paper .....	50
Second Paper .....	50
Oral and Practical (including Radiology) .....	50
Clinical Short cases (Medical)	50
Surgical Short cases .....	50
Clinical Long cases (Medical)	50
Total	<hr/> 300

Each successful candidate will have to obtain a minimum of 50% in Oral and Practical, Theory and Aggregate.

### *C.—COURSES OF STUDY.*

The following subject will be covered by the D. T. D. Course:

1. Infection and disease in Tuberculosis.
2. The Tubercle Bacillus.
3. The notion of contagion.
4. The Tuberculins.
5. Experimental Tuberculosis (Guinea Pigs or other animals).
6. Microscopic lesions of Pulmonary Tuberculosis.
7. Histology of Pulmonary Tuberculosis.
8. Elements of Clinical Diagnosis in Tuberculosis -



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9. Elements of Radiological Diagnosis in Tuberculosis.
  10. Tomography in Tuberculosis.
  11. Bacteriological Diagnosis of Pulmonary Tuberculosis.
  12. Study of morbi Physiology of Chest.
  13. First Tuberculosis infection in Children.
  14. Clinical forms of Tuberculosis in Children and the Adolescents.
  15. Primary infection in Adults.
  16. Military forms of Tuberculosis.
  17. Pneumonic and Broncho-Pneumonic forms of Tuberculosis.
  18. Evolutive process of Common Phthisis.
  19. The Tuberculous cavities.
  20. Hæmoptysis in Tuberculosis.
  21. Genetic in Tuberculosis.
  22. Mixed forms of Tuberculosis.
  23. Renal Tuberculosis.
  24. Laryngeal Tuberculosis.
  25. Bronchial Tuberculosis.
  26. Tuberculous Pleurisy.
  27. Bone and Joints Tuberculosis.
  28. Spontaneous Pneumothorax in Tuberculosis.
  29. Atelectasis in Tuberculosis.
  30. Cystic disease of lung.
  31. Cancer of lung.
  32. Bronchiectasis.
  33. Exploration of the Bronchial tree with Lipiodol.



34. Loeffler's Syndrome and other fleeting infiltrations of lung including Iodidopathic Eosinophilia of the lung.
35. Besnier Schanmann disease in lung.
36. Abscess of lung.
37. The Pneumokoniosis.
38. Hygienio-iefac treatment of Tuberculosis.
39. Chemo-Therapy in Tuberculosis.
40. Streptomycin in Tuberculosis.
41. Pneumothorax artificial in Pulmonary Tuberculosis, its indications and Physio-Pathology. Its technique and course.
42. Thoracoscopy and adhesions.
43. Dis-insertion of adhesions.
44. Pleurisy in artificial Pneumothorax and its treatment.
45. Pulmonary perforations.
46. Exercise and its indications and application in Pulmonary Tuberculosis.
47. Intra-cavitary drainage.
48. Phrenicotomy, etc. in Pulmonary Tuberculosis.
49. Bronchoscopy.
50. Thoracoplasty and its results.
51. Anti-Tuberculosis legislation and the Ministry of Health.
52. Anti-Tuberculosis Campaign and its results.
53. Organisation of Anti-Tuberculosis Dispensary.
54. Tuberculosis Sanatoria and its Problems.
55. Preventoria.
56. Graucher System of Prophylaxis in Tuberculosis.



57. G. C. G. Vaccine in Tuberculosis
58. The Profession and Tuberculosis.
59. Rehabilitation of the Tuberculous.

*Books recommended:*

1. Frishberg: Pulmonary Tuberculosis, Volume two.
2. Goldbery: Clinical Tuberculosis.
3. Morrison Davis: Pulmonary Tuberculosis and its Surgical Treatment.
4. Paget and Keers: Pulmonary Tuberculosis, etc.
5. Baldwin and Pettoff: Intestinal Tuberculosis, etc.
6. Girdleston: Surgical Tuberculosis of Bones and Joints.
7. Pottenger: Tuberculosis of the Child and Adult.
8. Ustvedt: Pulmonary Tuberculosis.
9. Laboratory Methods in Pulmonary Tuberculosis.
10. Recent Advances in Pulmonary Tuberculosis.
11. Calmuth: Tuberculosis Infection.
12. Mass Survey in Tuberculosis.
13. Brompton: Hospital Report.
14. Cummins: Primitive Tuberculosis.
15. Maurice Davidson: A Practical Manual of Diseases of Chest.
16. Tuberculosis in Young—Adult Report on the Prophit Survey 1935-44.
17. Mayer: Radiation of Climatic Theraphy of Chronic Pulmonary Diseases.
18. Hans Jacob Ustvedt Staples: Pulmonary Tuberculosis.



#### **XIV.—Diploma in Ophthalmic Medicine and Surgery.**

##### *A.—ORDINANCES.*

1. No candidate shall be admitted to the examinations of the Diploma in Ophthalmic Medicine and Surgery unless he has obtained the degree of M. B. B. S. from the University of Lucknow or such other University approved by the University of Lucknow.

2. The examination will be held in two Parts. Part I of the examination will cover the subjects scheduled under Part I of the Course. Part I of the course will commence in November and will be followed about the middle of April by Part I of the examinations.

Part II of the examination will cover the subjects scheduled under Part II of the Course. Part II of the course will commence in the middle of April and the examination will be held in the middle of October every year.

A separate examination for Part I of the course may be held in the last week of September for remanded students only.

3. No candidate will be admitted to Part II of the examination of the Diploma in Ophthalmic Medicine and Surgery unless he has satisfactorily attended a course of study for the Diploma at the University of Lucknow. He will be required to produce certificates showing:—

(1) That he has passed Part I.

(2) That he has attended a regular course of instruction for the Diploma at the University of Lucknow.



(3) That he has attended a regular course of instruction in Operative Ophthalmic Surgery.

(4) That he has been engaged during his clinical practices in the correction of errors of refraction.

4. No candidate shall be admitted to Part II of the examination of the Diploma in Ophthalmic Medicine and Surgery unless he has devoted subsequent to graduation, a period of ten months in clinical practice in the Ophthalmology Department of the King George's Hospital or in such other Hospitals as are approved by the Lucknow University specifically for this purpose.

5. *Fees* —The fee for the complete course will be Rs. 300.

The fee for Part I of the examination will be Rs. 100.

The fee for the Part II of the examination will be Rs. 100.

6. No course will commence unless there are at least three candidates.

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## B.—SCHEME OF EXAMINATION.

Ordinance.

### PART I.

Marks.

Paper I.—Anatomy and Embroylogy.

One Paper	....	....	50
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Oral and Practical	....	....	50
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Paper II.—Physiology and Optics.

One Paper	....	....	50
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Oral and Practical	....	....	50
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*Time allowed for each Paper—3 hours.*

Pass marks will be 50% in each Paper, 50% in Practical and Oral and 50% in Aggregate.

### PART II.

Paper I.—Clinical Ophthalmology.

Marks.

One Paper	....	....	50
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Clinical, Oral and Practical		....	150
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Paper II.—Pathology and Bacteriology.

One Paper	....	....	50
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Oral and Practical	....	....	100
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Paper III.—Optical Defects and Surgery.

One Paper (consisting of two Sections)	....	....	50
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Oral and Practical	....	....	100
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*Time allowed for each Paper—3 hours.*

Pass marks in each Paper and in each Section of Part III 50%—Aggregate 60%.

*C.—COURSES OF STUDY.*

The Course will consist of two Parts as follows:—

*Part I.—*

- (a) Anatomy and Embryology of the Eye and its appendages of the orbit and adjacent bones of the skull and of those parts of the Central Nervous System concerned in vision.
- (b) Physiology of vision.
- (c) Geometrical and Physiology Optics.

*Part II.—*

- (a) Clinical Ophthalmology.
  - (b) Pathology and Rectriology of the Diseases of the Eye and its appendages.
  - (c) Optical defects of the Eye and Ophthalmic Surgery.
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## CHAPTER XVI.

### CERTIFICATES.

#### I.—Certificate of Proficiency in French.

##### A.—ORDINANCES.

1. A Certificate of Proficiency in French will be granted to those students who have—

- (a) attended 75 per cent of the University lectures for the one year's course provided by the University for the subject, and
- (b) passed the prescribed examination.

Provided that teachers, as defined in para 4 (ii) of the Ordinances for the B. A. (Pass) degree, may be permitted to appear at the examination without attendance at lectures.

Provided that a student working for the Ph. D. or D.Sc. degree, who is permitted by the Dean concerned to work outside Lucknow, may be granted exemption for two terms from French classes.

Provided that a student working in the Faculty of Arts for the Ph. D. or D. Litt. degree, who is permitted by the Dean, on the recommendation of the Head of the Department concerned, to work outside Lucknow, may be granted permission to appear at the examination for a Certificate of Proficiency in French without attendance at lectures.

2. The course will be open to all University students as well as to graduates not necessarily reading in any Faculty of the University, and to teachers defined in para 4 (ii) of the Ordinances for the B.A. (Pass) degree.



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3. Three examinations will be held each year—one at the end of each term.

4. The examination will be by means of a written paper only.

5. Candidates who obtain not less than 36 per cent of marks in the paper shall be deemed to have passed the examination.

6. A candidate who has failed in the examination may be permitted to appear without further attendance at lectures at a subsequent examination on payment of fresh fees.

7. Names of successful candidates shall be published in one list arranged in alphabetical order.

8. The examiner will be appointed by the Executive Council on the recommendation of the Academic Council. The Dean will make a recommendation to the Academic Council. The remuneration of the examiner will be the same as that prescribed for the paper for the B. A. Pass examination.

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*B—SCHEME OF EXAMINATION.*

One paper will be set. The time allowed will be  
3 hours. Marks allowed for the paper—100.  
Regulations. Minimum pass marks—36.

The paper shall consist of—

- (i) Three passages from the prescribed texts and two unseen passages of a rather lower standard of difficulty for translation from French into English.
- (ii) A question requiring translation into English of sentences involving the more useful and familiar idiomatic constructions in French.

In (i) simple grammatical questions based on the passages will be set.

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### C.—COURSES OF STUDY.

#### *Text Books:*

Pascal: *Pensees*.

La Bruyere: *Les Caracteres*.

Michelet: *L'Inse cte*.

Moliere: *L'Avare*.

Vernce *Voyage au Centre de la Terre*.

(All the above from Blackie & Sons, Ltd., Bombay.)

#### *Books recommended:*

Ritchie and Moore:

Nelson's First French Course.

Nelson's Second French Course.

Dumas

—Le livre undque de Françai's Cours supérieur.

(Students taking the course should provide themselves with a small French Dictionary, *e. g.*, Gasc's Pocket French Dictionary, G. Bell & Sons, Ltd.)

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## II.—Certificate of Proficiency in German.

### A.—ORDINANCES.

1. A Certificate of Proficiency in German will be granted to those students who have—

- (a) attended 75 per cent of the University lectures for the one year's course provided by the University for the subject, and
- (b) passed the prescribed examination.

Provided that teachers, as defined in para 4 (ii) of the Ordinances for the B. A. (Pass) degree, may be permitted to appear at the examination without attendance at lectures.

Provided that a student working for the Ph. D. or D. Sc. degree, who is permitted by the Dean concerned to work outside Lucknow, may be granted exemption for two terms from German classes.

Provided that a student working in the Faculty of Arts for the Ph. D. or D. Litt. degree, who is permitted by the Dean, on the recommendation of the Head of the Department concerned, to work outside Lucknow, may be granted permission to appear at the examination for a Certificate of Proficiency in German without attendance at lectures.

2. The course will be open to all University students as well as to graduates not necessarily reading in any Faculty of the University, and to teachers as defined in para 4 (ii) of the Ordinances for the B. A. (Pass) degree.

3. Three examinations will be held each year—one at the end of each term.



4. The examination will be by means of a written paper only.

5. Candidates who obtain not less than 36 per cent of marks in the paper shall be deemed to have passed the examination.

6. A candidate who has failed in the examination may be permitted to appear without further attendance at lectures at a subsequent examination on payment of fresh fees.

7. Names of successful candidates shall be published in one list arranged in alphabetical order.

8. The examiner will be appointed by the Executive Council on the recommendation of the Academic Council. The Dean will make a recommendation to the Academic Council. The remuneration of the examiner will be the same as that prescribed for the papers for the B. A. Pass examination.

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*B.—SCHEME OF EXAMINATION.*

One paper will be set. The time allowed will be  
 Regulations. 3 hours. Marks allowed for the paper—100.  
 Minimum pass marks—36.

The paper shall consist of—

- (i) Three passages from the prescribed texts and two unseen passages of a rather lower standard of difficulty for translation from German into English.
- (ii) A question requiring translation into English of sentences involving the more useful and familiar idiomatic constructions in German.

In (i) simple grammatical questions based on the passage will be set.



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### C.—COURSES OF STUDY.

#### *Text:*

Weber: *Deutsch für Ausländer*, I Teil; Heckners, Verlag, Berlin.

Remme: *Deutschland; Lesebuch für Studierende Ausländer-Vorstufe*; Verlag des deutschen Institute, Berlin.

Schuler U. Sundermeyer: *Deutsche Sprach, lehre für Ansländer*; Deutsches Institute, Berlin.

Moffat: *Science German*; University Tutorial Press, Ltd., London.

#### *Supplementary Reading:*

Remme: *Deutsch and; Lesebuch für Studierende Ausländer-Vorstufe*; Verlag des deutschen Institute, Berlin.

Moffat: *Science German*; University Tutorial Press, Ltd., London.

#### *General:*

Remme: *Deutschland: Lesebuch für Studierende Auslander; IV Auflage*; Vurlag des deutschen Institute, Berlin.

Jockers: *Die Deustchen—Ihr Werdenu, \* Wesen*; Johnson Publishing Company, New York.

#### *Science:*

Kip: *A Scientific German Reader*; Oxford University Press, London.

(Students taking the course should provide themselves with a German Dictionary *e. g.* Whitney: *German and English Dictionary*, Henry Holt and Company, New York, or any standard dictionary of equal excellence).



### III.—Certificate of Proficiency in Russian.

#### A.—ORDINANCES.

1. A Certificate of Proficiency in Russian will be granted to those students who have—

(a) attended the one year's course provided by the University for the subject, and

(b) passed the prescribed examination.

Provided that teachers, as defined in para 4 (ii) of the Ordinances for the B. A. (Pass) degree, may be permitted to appear at the examination without attendance at lectures.

Provided that a student working for the Ph. D. or D. Sc. degree, who is permitted by the Dean concerned to work outside Lucknow, may be granted exemption for two terms from Russian classes.

Provided that a student working in the Faculty of Arts for the Ph. D. or D. Litt. degree, who is permitted by the Dean, on the recommendation of the Head of the Department concerned, to work outside Lucknow, may be granted permission to appear at the examination for a Certificate of Proficiency in Russian without attendance at lectures.

2. The course will be open to all University students as well as to graduates not necessarily reading in any Faculty of the University, and to teachers defined in para 4 (ii) of the Ordinances for the B. A. (Pass) degree.

3. Three examinations will be held each year—one at the end of each term.

4. The examination will be written and oral according to the scheme described in B. Scheme of Examination.



5. Candidates who obtain not less than 40 per cent of marks in the paper shall be deemed to have passed the examination.

6. A candidate who has failed in the examination may be permitted to appear without further attendance at lectures at a subsequent examination on payment of fresh fees.

7. Names of successful candidates shall be published in one list arranged in alphabetical order.

8. The examiner will be appointed by the Executive Council on the recommendation of the Academic Council. The Dean will make a recommendation to the Academic Council. The remuneration of the examiner will be the same as that prescribed for the papers for the B. A. Pass examination.

### *B.—SCHEME OF EXAMINATION.*

The Examination for the Certificate shall be written and oral according to the following Scheme.  
 Regulations. One paper will be set. The time allowed will be 3 hours. Marks allowed for the paper—100. Minimum pass marks—40.

The paper shall consist of—

- |   |                |
|---|----------------|
| (i) Translation from Russian<br>into English  | .... 50 marks. |
| (ii) Translation from English<br>into Russian | .... 50 marks. |

In (i) simple grammatical questions based on the passages will be set.

Oral (a) Reading of unseen passages .... 75 marks.

(b) Conversation (reply to  
questions put in Russian) .... 75 marks

Minimum pass marks .... 40 per cent



*C.—COURSES OF STUDY.*

The Russian alphabet, pronunciation of consonants and hard and soft vowels, the "soft sign", diphthongs. Noun. The Adjective, Genders, Declension. The Pronouns. The Numerals. The Adverbs. The Prepositions. The Verb (the 1st and 2nd conjugation of regular verbs). The durative (imperfective) and punctual (perfective) aspects of the Russian verb.

Exercises in reading; translation from Russian into English and from English into Russian. Simple conversation.

*Books:*

1. Maximilian Fourman: Teach Yourself Russian (Hodder and Stoughton Ltd. for the English Universities Press Ltd., London).
2. Other books to be notified later.

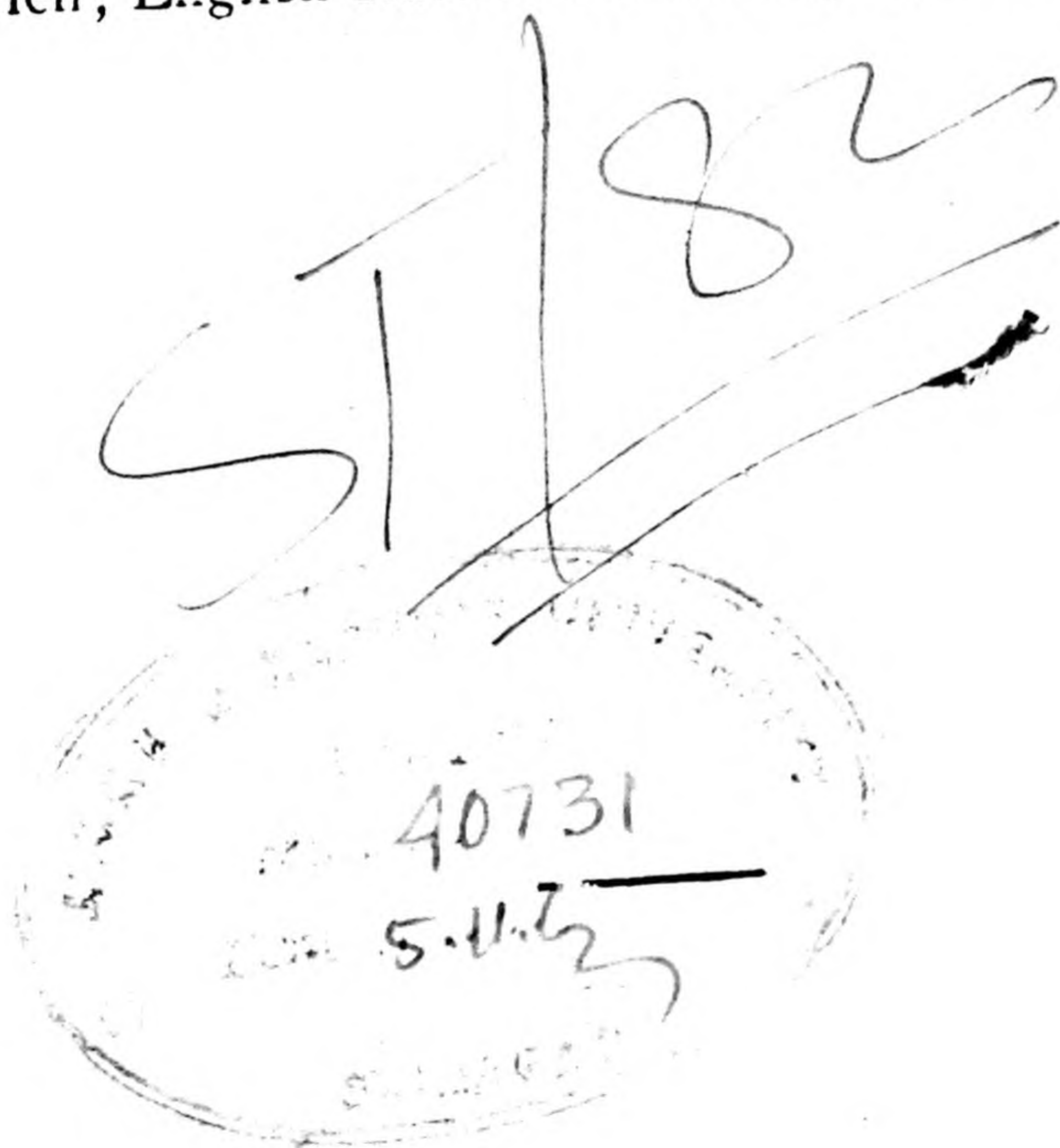
*Books recommended:*

1. Nicolas Sollohub: Russian in a Nutshell (Hutchinson & Co., London).
2. G. A. Birkett: A Modern Russian Course (Methuen & Co., London).
3. The Teach Yourself Russian Phrase Book (Hodder and Stoughton Ltd. for the English Universities Press Ltd., London).
4. Mark Sieff: Colloquial Russian (Kegan Paul, Trench, Trubner, London).
5. Nicholas N. Sergievsky: How to read, write and speak Modern Russian (Frederick Ungar Publishing Co., New York).



Other new readers and grammars may appear abroad from time to time and additional books will be recommended, as they are received and become known in India.

(Students taking the course should provide themselves with Russian-English and English-Russian Dictionaries *e. g.* Russian-English and English-Russian Dictionary by O'Brien; English-Russian Dictionary by Louis Segal).









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**NEWUL KISHORE PRESS,  
LUCKNOW.**

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**1951**

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